

**Three Year Operational Plan
for
Restoration of A’Deane’s Bush Scenic Reserve
July 2009 – July 2012**



Prepared for



FRIENDS OF A’DEANE’S BUSH



Executive Summary

A'Deane's Bush Scenic Reserve, Central Hawke's Bay, is a significant conservation landmark and includes one of the few native forest remnants in the Ashley Clinton district. The 38-hectare reserve is also home to one of the largest totara trees in the country and the threatened long tailed bat and green mistletoe.

The Department of Conservation and Friends of A'Deane's Bush have agreed to enter a partnership to restore, protect, and enhance the indigenous flora and fauna of A'Deane's Bush Scenic Reserve. Friends of A'Deane's Bush currently includes neighbours John and Jay Benton, Larry and Jane White, Dr Matt Baber of Ecovision and Kay Griffiths and Craig Single of The Conservation Company Ltd. Hawke's Bay Regional Council has also expressed interest in helping in the surrounding landscape.

The vision of this partnership is to create a wildlife sanctuary where native plants and animals flourish, and where local community and visitors are encouraged to experience and learn about the ecological restoration of New Zealand's natural heritage.

The process of ecological restoration will include the control of introduced mammals and weeds, native revegetation of select terrestrial, riparian, and wetland habitats, and maybe ultimately, the reintroduction of appropriate locally extirpated native species.

Public use, awareness and support for the reserve will be gained through raising the local and regional public profile of the reserve, volunteer opportunities, and the improvement of general and educational visitor facilities at the reserve..

This document is an operational plan, intended to provide a framework and timeframe for the first three-years of restoration efforts at A'Deane's Bush. Parts of this operational plan have been taken from previous plans – a 5 year restoration plan, a landscape plan, a weed operational plan and a mammalian predator plan all written in 2007. These previous plans are attached as appendixes and should be read in conjunction with this current plan as they give more detail on background and objectives.

This plan should be reviewed and updated at the end of each year to include lessons learnt, new technology and better ideas!

Friends of A'Deane's Bush / Organisation Roles

Jay and John Benton:	Decision making, co-founders, financial support
Larry and Jane White	Local knowledge, community outreach
The Conservation Company	Project coordinator and key contact, technical expertise, local knowledge,
Matt Baber:	Ecological expertise, fundraising
HBRC:	Technical expertise, pest control support in surrounding landscape
DOC:	Land owner/ manager, technical expertise, community consultation and outreach, pest control

Restoration of A'Deane's Bush - operational objectives over next three years

1. To facilitate involvement of local community and raise public profile
2. To monitor the abundance of introduced mammals
3. To control introduced mammals
4. To control invasive plants
5. To monitor native species response to above control
6. To re-vegetate margins of bush and wetlands in appropriate species

1. To facilitate involvement of local community and raise public profile

Objective: To educate, and gain support of, local community in restoration and recreation activities.

Action for Friends

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Involve local school and community in two "open / volunteer" days. Recruit local volunteers to help with bait station maintenance.	Continue to have open / volunteer days. Recruit volunteers to help with pest control. Possible signage on restoration.	Continue with volunteers and schools
<i>Costs</i>	Labour, co-ordination,	Labour, co-ordination,	Labour, co-ordination,
<i>Budget</i>	\$500	\$500	\$500

Action for DoC

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Support "Friends" with media release etc for open days, work through access issues with neighbour, maintain tracks	Support "Friends" in community. Possible new road in, possible signage, maintain tracks	Support "Friends" in community, maintain tracks

<i>Costs</i>	Roading, legal issues, labour, equipment	Roading, legal issues, labour, equipment	Labour, equipment
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2. To monitor presence of introduced mammals

Objective: Monitor the abundance of rats and mustelids within the reserve and adjacent land by best practice methods.

This will ensure control is effective.

Action for Friends:

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Set up monitoring lines for rats and run these prior to control regime beginning, then again twice throughout spring / summer	Recruit volunteers to run tracking lines for rats, set up tracking lines for mustelids	Continue to monitor with volunteers and schools
<i>Costs</i>	Labour, tracking tunnels and papers	Labour, Tracking tunnels and papers	Labour, Tracking papers
<i>Budget</i>	\$1000	\$1000	\$1000

Action for DoC: support with technical expertise

3. To control introduced mammals

Objective: To control mammalian pests within the reserve and in immediately adjacent areas to low densities. This will help restore ecosystem process by lowering the impact of mammalian pests within the reserve. First priority is to reduce possum and rat numbers to low levels from early spring to late summer, which corresponds with the avian breeding season. Start to control mustelids over the same time period as time and budget and volunteer opportunities allow. See Appendix 1 & 2

Action for Friends

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Reduce rats to less than 5% tracking over spring/summer. Strategy for bait application to be based on best known practice in consultation with DoC, adjoining landowners, HBRC. Involve volunteers in maintenance.	Continue rat control – refine bait station strategy dependent on results achieved. Continue to involve volunteers in maintenance of bait stations.	Continue rat control as year one and two. Set up mustelid control if time and budgets allow..
<i>Costs</i>	Labour, bait stations, bait	Labour, bait stations, bait	Labour, bait stations, bait
<i>Budget</i>	\$7000	\$7000	\$7000

Action for DoC

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
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<i>Task</i>	Continue to control and monitor possums to below 5% RTC , continue to gain consent for toxin use and include rat baits	Continue to control and monitor possums, continue to gain consent for toxin use and include rat baits	Continue to control and monitor possums, continue to gain consent for toxin use and include rat baits
<i>Costs</i>	Labour, bait stations, bait	Labour, bait stations, bait	Labour, bait stations, bait

4. To control invasive plants

Objective : Control priority 1 weeds – Old mans beard, periwinkle and Tradescantia by chemical and physical control (by contractor). Start control of priority 2 weeds by contractor and volunteers. See Weed Control Operational Plan for detail (Appendix 3)

Action for Friends

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Cut and paste remaining adults, spray large areas of OMB, Tradescantia, periwinkle	Continue control Priority 1 weeds by contract. Recruit volunteers for seedling control	Continue year two control, Start priority 2 weeds and involve volunteers
<i>Costs</i>	Labour, chemical	Labour, chemical	Labour, chemical
<i>Budget</i>	\$3000	\$3000	\$3000

Action for DoC

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Continue to control Selaginella on tracks	Continue to control Selaginella on tracks	Continue to control Selaginella on tracks
<i>Costs</i>	Labour, chemical	Labour, chemical	Labour, chemical

5. To monitor native species response to above control

Objective: Monitor of key bio-indicator species to show that controlling introduced mammals and invasive plants is having the desired effect. In the original restoration plan there was an aim to at least double tui and kereru numbers inside the reserve within the first two years of implementation, and maintenance or increase of tui and kereru abundances thereafter.

Action for Friends

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Set up monitoring of tui and kereru using 5 minute bird counts and distance sampling. Once in spring and autumn. Use volunteers where possible. Set up some photo-points for vegetation monitoring	Monitor of tui and kereru using same techniques. Recruit schools or volunteers to set up artificial covers for skink monitoring and pitfall traps for beetles	Continue to monitor tui and kereru using same techniques
<i>Costs</i>	Labour,	Labour,	Labour,

<i>Budget</i>	\$500	\$500	\$500
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Action for DoC – support with technical expertise

6. To re-vegetate margins of bush and wetlands in appropriate species

Objective : To re-vegetate terrestrial bush margins, riparian areas and wetlands in accordance with the landscape plan.

See Appendix 4.

Action for Friends

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Have planting as part of open / volunteer days (prepare sites, order plants etc)	Involve schools or volunteers in growing of plants for revege?., and planting. Have seed collected and grown on from A'Deane's. Prepare for wetland enhancement plantings.	Continue planting as landscape plan advocates involving volunteers and schools
<i>Costs</i>	Labour, plants	Labour, plants	Labour, plants
<i>Budget</i>	\$1500	\$1500	\$1500

Action for DoC

	<i>Year one</i>	<i>Year two</i>	<i>Year three</i>
<i>Task</i>	Provide some plants from Ahuriri nursery, Help out with open days	Provide some plants from Ahuriri nursery, help out with open days	Provide some plants from Ahuriri nursery, Help out with open days
<i>Costs</i>	Labour, plants	Labour, plants	Labour, plants

Appendixes

- 1: A'Deanes Bush Fiver Year Restoration Plan (2007), M. Baber
- 2: Draft Mammalian Predator Plan (2007). J. Henry (DoC)
- 3: Invasive Weed Control Operational Plan (2007), K.Griffiths
- 4: Landscape and Concept Plan (2007) H. Scheltus. (DoC)