ATTACHMENT II

'THE ARK IN THE PARK'

Operational Plan for an Open Sanctuary Cascades Kauri Park. Waitakere Ranges

Waitakere Branch
Roval Forest & Bird Protection Society Inc.

August 2002

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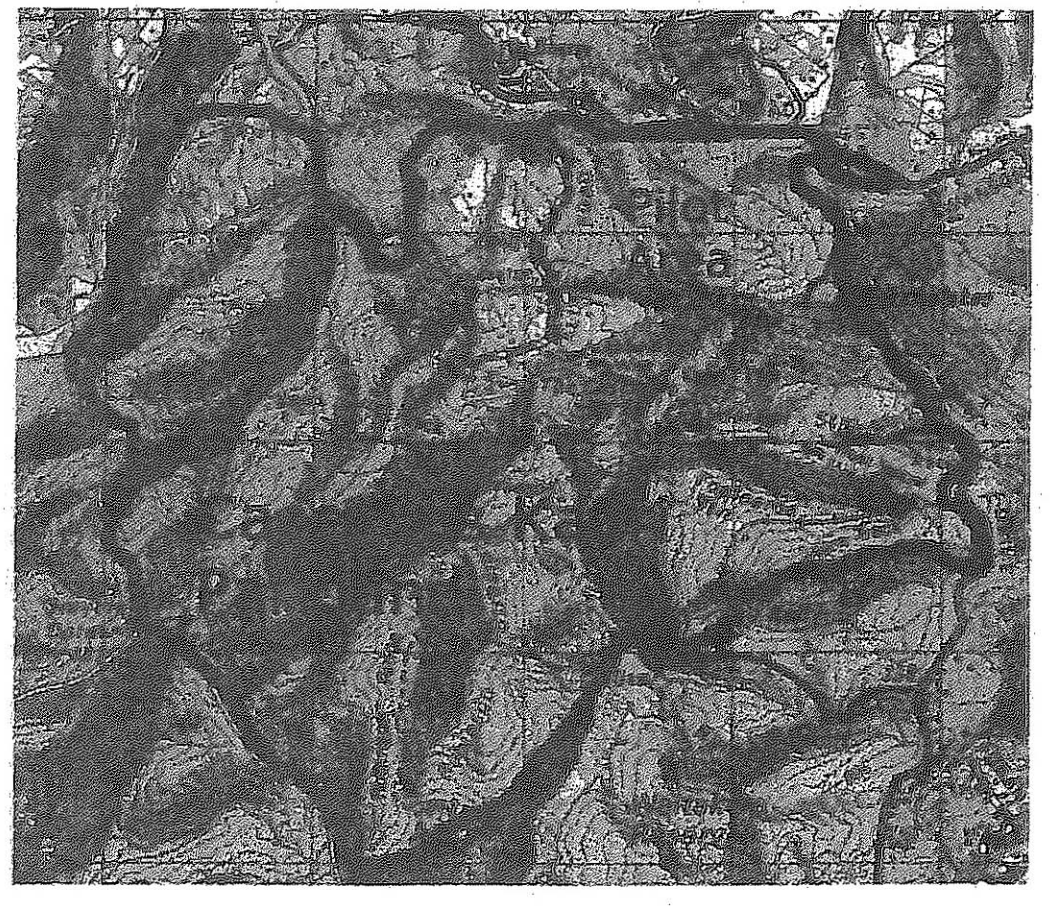
Purpose

The purpose of this plan is to provide details on the methods of pest control for the proposed Ark in the Park Open Sanctuary in the Cascades Kauri Park. The plan identifies the various pest control methods for each species, monitoring and health and safety matters.

Figure 1 **Location of the Ark in the Park Open Sanctuary area in the Waitakere River catchment. The total area is 800ha and the initial pilot area is 2-300 ha.**



Workforce

The Ark in the Park project expects to carry out most of this work with a volunteer workforce. The existing list of volunteers from organisations such as tramping clubs, and eco-tour groups will increase as word spreads about the project. There have been expressions of commitment from several individuals to give regular days per week or month to the project.

The Conservation Corps, which has 80 students per annum, has already committed itself to the initial monitoring programme. This group is also willing additionally, to do baiting and trapping. As the project grows it is likely that the project will require a paid employee to co-ordinate volunteer activities and this has been identified as a priority for fund-raising. This person will liase closely with local ARC ranger staff.

Base for Operations

Permission will be sought from the ARC to use space at the Cascades Ranger station for storage of bait, tunnels, traps etc. Permission will also be sought to use the staff-room as a briefing and refreshment area for volunteers. Permission has been given by the Auckland University Tramping Club for use of its hut on the Ridge Road Track for the Conservation Corp, who will be establishing and maintaining the monitoring programme. Permission will be sought for this group to camp at the Pae O Te Rangi campsite. These two sites, and possibly the nearby Karanga church camp may be used at times by volunteers so that maximal use of time in the area can be achieved. The hut, campsite and Karanga also provide a variety of geographically separated sites for future use by students involved in studies, such as post-release monitoring.

ANIMAL PEST CONTROL:

POSSUMS & RATS

Establishment

Initially predator control in The Ark in the Park will be based on the existing possum control grid pattern established by the ARC since 1998.These grid lines are set approximately 200m apart with Philproof feeder stations every 100m along these lines. This pattern extends beyond the south and west boundaries of the Ark in the Park. While this bait station density is sufficient for possum control, it will need to be increased by the addition of extra lines set halfway between the existing ones and by adding more feeder stations along each line to achieve an ultimate spacing of grid lines 100m apart and bait stations 50m apart along the grid lines. At this trapping density possum and rat control can be expected to be reduced to less than 1% tracking frequency as monitored by tracking tunnels.

NOTE:

Further assessments of the efficacy of control using trapping alone as is being performed in some of DoC's mainland island projects. If numbers of possums and rats can be reduced sufficiently by trapping alone, this may be introduced to part or all of the area to lessen the problems of possible bait-avoidance and resistance to minimise the amount of bait in the environment.

Maintenance
Bait stations will be loaded with bait (currently Brodifacoum as is being used by the ARC) primarily during the breeding season from September to February. Bait will be added to the stations at approximately monthly intervals by the volunteers. Advice will be taken as to whether occasional baiting at other months in some or all years will be advantageous. Records will be kept by the volunteers as to the approximate bait "take" at the individual stations and this, along with results of the monitoring programme, will indicate to the management committee the approximate amount of bait needed in subsequent months. Old bait left over at bait stations will be removed. Volunteers will be instructed as to the requirements for personal safety while handling new or spent bait, and the requirements to avoid spillage of bait around stations or en route. The current Ministry of Health protocols used by ARC pest contractors for pesticide spillage in watershed areas will be adhered to.

Monitoring
Monitoring of the presence of rodents and their abundance relative to a non-controlled area will occur at regular intervals of not more than 12 weeks. The monitoring programme will follow DoC protocols using plastic tunnels established at fixed points, which will have attractant lures (usually peanut butter). The presence of rodents will be noted by their footprints left on papers within the tunnels (NPCA protocol). Possum monitoring will be undertaken as part of the regular ARC monitoring of possum numbers throughout the ranges, using the residual trap catch methodology (NPCA 2001)[1].

MUSTELIDS

Establishment
Mustelid-kill traps will be set around perimeters of the controlled area at 100m intervals and within the area to achieve an overall density of approximately 0.3 traps/hectare, according to DoC protocols .The mustelid lines will more often follow stream sides or tracks and be accessible as they require regular checking.

Maintenance
Mustelid traps will have attractants such as fresh meat, eggs, freeze-dried rat or dead day-old chicks added and will be checked weekly. Old bait will be removed to reduce wasp nuisance.

Monitoring

[1] NPCA 2001 Protocol for possum population monitoring. National Possum Control Agencies, Wellington.

The monitoring for mustelids will follow DoC protocols using tracking tunnels. Tunnels have lures of fresh meat; egg and freeze-dried rats added and are checked after 3 days, and footprints are assessed in tracking tunnels.

CATS

Establishment
Cage traps for live capture of feral cats (or straying domestic cats) will be placed at suitable sites. These sites will vary and rely on sightings; presence of cat scat; or suspicion of presence.

Maintenance
As live capture techniques are being used, traps will be checked the next day. Feral cats will be humanely destroyed and domestic cats with identifying collars will be returned to their owner. An education programme will be undertaken to encourage neighbouring property owners who have cats, to fit their cats with identifying collars that may be supplied.

Monitoring
There is no suitable monitoring of cats.

OTHER ANIMAL PESTS:

Control measures for other possible pests e.g. wasps, hedgehogs and exotic birds will depend on assessments of their actual or perceived effects and use the current most appropriate method of control. These species will be monitored as resources become available.

PLANT PESTS

Ark in the Park volunteers may be able to assist in removing weeds from the project area. The recently established ARC Weed Presence Map (June 2002) with weed infestations plotted with GPS grid references will be consulted and under guidance of ARC rangers, gradual removal of the pockets of infestation will be achieved.

A weed control plan for the catchment will be prepareded to prioritise target species and sites for control. In the pilot area the main areas of plant pest infestations are around the periphery of the Waitakere Golf Course and along the roads around the area. The priority plant pests in this area are: Kahili ginger, blue morning glory, jasmine, purple pampas, German ivy. These plant pests will be controlled with knapsack application of Escort®, except for pampas, which can be controlled with glysophate. This work will only be undertaken when the weed control plan is complete. health and safety approval is forthcoming and if ARC's park operations have not already controlled the pests.

DRAFT HEALTH AND SAFETY PLAN

RISK ANALYSIS AND MANAGEMENT SYSTEM (RAMS)

This plan follows the Waitakere City Green Network guidelines for community groups to prepare health and safety plans for community run projects on public land ("Managing Risks & Loss" – Waitakere CC, 2000).

RISKS Accident, injury, other forms of loss		**Personal injury from falls, hypothermia, sub-acute poisoning and traffic collisions.**		
CAUSAL FACTORS Hazards, perils, dangers		People	Equipment	Environment
		Fitness, familiarity with the area, insufficient attention to pedestrian road safety	**Traps, poison baits**	**Steep terrain, wet weather, narrow roads**
RISK MANAGEMENT STRATEGIES Remember to: communicate, and take "all practicable steps"	Normal Operation E=Eliminate I=Isolate M=Minimise	**Minimise risks with appropriate training. Ensure people are only working in areas designated and in teams of at least 2. Warn people about stepping out of the bush onto roads.**	**Minimise risks with appropriate training**	**Isolate areas of steep terrain to those capable of working in these places. Minimise work in wet weather.**
	Emergency	**Have a search and rescue procedure for people emergencies. Follow ARC/Watercare operational procedures for controlling pesticide emergencies. Contact police and ambulance for traffic collisions.**		

RELEVANT INDUSTRY STANDARDS APPLICABLE (Do be aware of what these documents recommend)	ARC protocols and policies for possum bait handling and disposal.
POLICIES AND GUIDELINES RECOMMENDED (by your own organisation)	ARC protocols and policies for possum bait handling and disposal.
SKILLS REQUIRED BY STAFF/ACTIVITY LEADERS	First Aid certificated persons and Doctor on-call.
PERMISSION GRANTED BY COUNCIL (Needed only if the activity is on public land)	Choose One Yes / No / N/A Comments: Pending
FINAL DECISION ON IMPLEMENTING ACTIVITY	Choose One Accept / Reject Comments: Pending

CONSERVATION VALUES
RISK ANALYSIS AND MANAGEMENT SYSTEM

RISKS Damage that may be caused		**Degradation of ground tier vegetation, disturbance of territorial and nesting or breeding wildlife.** **Loss of bait into the environment.**		
CAUSAL FACTORS How could the damage happen		People	Equipment	Environment
		People disturbing vegetation and wildlife. People accidentally dropping bait.	**Native wildlife caught in traps or taking poison baits.**	**None**
RISK MANAGEMENT STRATEGIES	**Normal Operation** Eliminate, Isolate, Minimise, Mitigate	**Minimise by keeping to tracks Minimise activities in the area. Follow bait handling and disposal protocols.**	**Minimise by using bird excluders on traps and bait stations, and non-attractant baits.**	**NA**
SKILLS /AWARENESS Required by Participants		**Awareness of the site sensitivities to disturbance and the locality of areas sensitive to disturbance.**		

DECLARATION OF KNOWN RISKS

	RISKS – known or reasonably expected to be apparent	Other comments
ENVIRONMENT	**Wet weather** **Dense vegetation** **Steep terrain** **Wasps in autumn**	
EQUIPMENT	**Slippery board walks and tracks** **Poison bait** **Stoat traps**	
PEOPLE	Personal fitness and familiarity with the terrain **Safe handling to baits and traps** **Traffic safety when stepping out onto roads.**	

ATTACHMENT III

FRIENDS OF ARATAKI

Resolution

1. *That Friends of Arataki invite Waitakere Branch of Forest & Bird Society to take over the management and administration of* ***The Ark in the Park*** *project.*
2. *That Friends of Arataki continue to support* ***The Ark in the Park*** *project through fundraising assistance and publicity.*
3. *That Friends of Arataki request of Forest & Bird that up to 2 nominees of Friends of Arataki be elected to the management committee for* ***The Ark in the Park*** *(being a sub committee of Waitakere Branch of Forest & Bird)*
4. *That the relevant* ***The Ark in the Park*** *documents including the logo be transferred from Friends of Arataki to Forest & Bird.*
5. *That the Friends of Arataki* ***The Ark in the Park*** *bank account be closed with the funds transferred to a dedicated Forest & Bird bank account, subject to legal opinion.*
6. *That* ***The Ark in the Park*** *strategic plan be presented to the Auckland Regional Council on the basis of the above.*

Passed at Committee meeting July 17 2002

Y. Dreaver } Co. Presidents The Friends of Arataki
01/08/02

FRIENDS OF ARATAKI, P.O. BOX 60-228, TITIRANGI, WAITAKERE CITY. PHONE : 09 817 4941 FAX: 09 817 5656

ATTACHMENT IV

The Ark in the Park

A collaborative project between the Friends of Arataki; Royal Forest & Bird Protection Society, Waitakere branch;

Some letters of support for **The Ark in the Park** project :

Bob Harvey , Mayor of Waitakere City

Bruce Fletcher , President ,West Auckland District Tramping Club [Inc]

Jan Brown , Sec. Oratia Ratepayers & Residents Assoc.

Kaye Lindley , Active Living Manager , Sport Waitakere

Maureen Harris , Sec., Auckland Tramping Club [Inc]

Peter King , La Trobe Forest Restoration Project , Karekare

David Pye , Ornithological Society of New Zealand [Inc]

Geoff Moon, O.B.E.

Stephen Jackson , Director, New Zealand School of Outdoor Studies

Dr Shane Wright , Lecturer in Ecology , Auckland University

Russell Leese ,Director ,Bush & Beach Ltd

Judy Woodcock , Liason Officer , Auckland Baptist Tramping Club[Inc]

Pat Jenner ,Sec. ,North Shore Tramping Club [Inc]

Anthony Brown , Waiatarua Ratepayers & Residents Assoc. Inc.

Mel Galbraith , Lecturer in Ecology , UNITEC Institute of Technology

David Bryant, Karekare resident

Irene Ogden ,Principal & Ian Cartwright Teacher Organiser , Henderson North School

The Ark in the Park,
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Tel: 64-9-817 8050

Tiakina nga manu, ka ora te ngahere. Kia ora te ngahere, ka ora te manu.
Look after the birds and the forest will flourish. If the forest flourishes then the birds will flourish.