NEH4003

Application for a

Section 91 Licence

to harm or pick a threatened species, population or ecological community*, or damage habitat under the *Threatened Species Conservation Act 1995.*

1. Applicant's Name: *(if additional persons require authorisation by this licence, please attach details of names and addresses)*	[redacted]
2. Organisation name and position of Applicant: *(if applicable)*	[redacted]
3. Postal address:	[redacted]
4. Telephone:	[redacted]
5. Location of the action: *(including grid reference and local government area and delineated on a map).*	Burdekin Park GDA94 Lat -32 33 54 Long 151 10 34 LGA: Singleton And the urban area of Singleton if required.
6. Full description of the action and its purpose *(eg. scientific research, environmental assessment, regeneration activities, development etc.).*	**Introduction** A colony of Grey-headed Flying-fox (GHFF) has seasonally resided in Burdekin Park since Spring 2000. Over winter the numbers have reduced. However during July, August and part of September 2005 there were no GHFF in the park. The purpose of this Licence is to put management arrangements in place to enable bat deterrents to be used.

* A threatened species, population or ecological community means a species, population or ecological community identified in either Schedule 1 or Schedule 2 of the *Threatened Species Conservation Act 1995.*

Background

Burdekin Park is Singleton's premier park, and is located on the New England Hwy in the middle of the town. The presence of the colony is inflicting severe crown damage in mature trees, some of which are over 120 years old. The Park is listed as a Heritage Item of Local Significance in the Singleton Local Environment Plan 1996. The mature trees impart the majority of the heritage value to the Park. The Museum building situated within Burdekin Park is of state significance. The colony is also creating a nuisance amongst some sectors of the local community as detailed below:

- The Park hosts the town's war memorial. The RSL has made complaints to Council re: dawn memorial services being disrupted (participants being defecated upon by GHFF) and memorials damaged by the GHFF faeces.
- Hunter Valley Guides used to hold monthly markets in the Park however stall holders and visitors are being deterred by smell and faeces of the GHFF, particularly by spoiling of food and stock. The markets have moved to a less desirable site due to the flying foxes.
- Some sectors of the community believe the GHFF propose a health risk and are reducing visitor numbers to the park.
- Council has had to increase maintenance duties in the park to overcome slip hazards, lawn damage, tree defoliation and spoiling of fixtures

Activities that currently occur in Burdekin Park include:-

- Garden weddings
- Bands in the Park (first weekend in November).
- Remembrance Day/Armistice Day/Anzac Day ceremonies.
- Carols by Candlelight (now moved due to Flying foxes).
- Launch of Christmas Lights in Burdekin Park Trees (now moved due to flying foxes).
- Town Band concerts.
- General maintenance eg mowing and petrol-powered whipper-snipping, edging, yard vacuum cleaning and chainsaw maintenance of trees.

Burdekin Park has the only war memorial in Singleton for the Boer War, WWI and WWII. The Park also hosts the only outdoor band shell in the town.

In 2002/2003 in response to the GHFF issue, Singleton Council held a public meeting and subsequently formed a steering committee to discuss the issue and possible solutions. The steering committee comprised representatives from NPWS, Council, RSL Singleton Sub-Branch, Wildlife carer groups and concerned citizens. After the public meeting, the steering committee

convened on a further two occasions, to review facts about the GHFF and case studies in their management. After much consideration, the committee resolved to 'relocate the flying-foxes by non-lethal means'.

Previous Attempts and Methods to discourage GHFF

Council used a Bridged deterrent in April 2003 in an attempt to deter the GHFF from returning to the park in Spring. Other methods including the use of hand held hoses and lighting were trailed in a relocation program but all methods proved to be unsuccessful.

Council resolved that an all out effort be made from the 4th August to 18th August 2003 to remove the flying foxes in Burdekin Park using sound equipment, water and lighting.

Five different methods were used:-

- Electronic and other mechanical noise
- Water Sprays
- Hire Hose
- Lighting
- Beacons, reflective objects etc hung in trees.

The only effective methods were loud mechanical noise and water sprays. The flying foxes left the park but deterrents had to cease due to bats roosting in undesirable sites eg. trees near residences and the hospital.

Work ceased on the 18th August 2003. Since this time bat numbers have varied up to about 3,000 flying foxes. Generally GHFF and some Little Red Flying Foxes (Peropus scapulaus).

There has been significant community debate in Singleton about the flying foxes in Burdekin Park during 2004 and 2005. On the 29th March 2005 Singleton Council considered and accepted an offer by Mr. Les Shilton to attempt to remove the flying foxes using noise generated by modified motor mowers. Mr Shilton and associates conducted this work on a volunteer basis for one week from Monday the 18th to Saturday the 23 April 2005 in an attempt to remove the flying foxes for the Anzac Day ceremonies. Unfortunately the method was not entirely successful and there were still flying foxes present at the Anzac Day ceremonies causing considerable disturbance and discomfort to those present.

The methodology was to use modified motor mowers and whipper snippers to emit loud noise in an attempt to disturb the flying foxes and encourage them to move on. The procedure is detailed below:-

- The noise commenced early in the morning and continued for up to half an hour. This was repeated four to five times a day, after a half hour rest for the flying foxes, until dusk. Experience elsewhere, for example Melbourne Botanic Gardens, demonstrated a major work (longer hours) is required in the early days of the project with fewer hours as the project proceeds.

- Two or three cars monitored when the flying foxes left the park. When the flying foxes roosted in urban areas/homes a volunteer knocked at the home and the immediate neighbours to gain concurrence to use the modified mower noise to move the bats on.

- Sites that are potential bat camp sites were identified. The methodology was to try and move the bats in these directions whenever possible over the term of the project. The sites include the riparian zone of the Hunter River near Redbournberry Bridge including Clydesdale Reserve and Fern Gully Road gully area. All these areas have moderate to large trees and are due east of Singleton. All these areas are well away from residences and commercial areas.

The NSW NP&WS flying fox camps data base shows camps at Cranky Corner (about 23km from Burdekin Park) and at Paterson (about 37 km from Burdekin Park). Both these sites are in an easterly direction from Singleton. The sites were inspected but no flying foxes were found.

This particular project was proposed as an ongoing procedure and if the flying foxes returned to the park the following procedure was followed:-

- Allow the bats to rest for approximately half an hour before recommencing the noise.

- A vineyard LPG gas noise gun will be used to make a single noise in the park approximately:-

  - 8 a.m. daily (9 a.m. Sunday)
  - 6 p.m. daily.

Although the effort did influence the flying foxes to leave the park they returned soon after. Efforts to remove the flying foxes ceased Saturday 23 April 2005.

Proposed Methodology 2007

It is proposed that approval be granted for a variety of methods using. A water dissolved product called D-Ter which would be sprayed onto tree foliage and branches, This would allow an appropriate method depending on the circumstances, for example the number of flying foxes returning or current season, and the resources available at the time of return. Council is seeking approval to apply the following method:-

Method One – Use of D-Ter

D-Ter is a product made from:
997.3g/kg Aluminium ammononium sulphate
1.5gm/kg Sucrose octa-acetate,
0.1g/kg denatonim benzoate
It is not classified as a dangerous good, has no sub risk, and is not required to be listed as a poison.
Material safety data sheet and accompany documents are attached.

A cherry picker will be used to reach above the tree canopy; the D-ter will be applied using a pressure spray at the rate of 100g/litre of water onto the tree braches, stems and leaves. This will be completed when the least number of bats are present, so as not to spray the bats.

"D-Ter is very safe- there is no withholding period and it is not a scheduled poison. It is effective and registered for use against all animals and birds
D-Ter repels by creating a feeling that the treated area is unsafe and threatening. This is reinforced when they quickly leave and the feeling disappears. Thus not only are they harmlessly repelled but the effect lasts far far longer than the D-Ter itself" (Ref Lorac Australia Pty Ltd) manufacturers of D-ter.

Observation
The park will be monitored daily for the return of the bat colonies. It is considered that a bat carer is not required due to the maturity and experience of those involved. Upon return of the flying foxes Council's Manager Parks & Facilities will be immediately notified to determine which method is to be used. The most effective method will be used based on current available resources and the specific set of circumstances surrounding the return of the flying foxes. It is hoped that by initiating a response to the return as quickly as possible, allowing for a thirty minute rest time, the bats will move on soon after returning thereby discouraging them from roosting in Burdekin Park.

7. Total area of site where action required.	1:54 Ha See attached aerial photo of park.
8. Duration and timing of the action *(including staging, if any).*	Use of the deterrent methods will commence after the Section 91 Licence approval, and will be an ongoing process. The term of this licence is requested up until the 1 October 2009. Council is aware of the Breeding cycle of the Grey headed Flying Fox and **will not** undertake any work during vulnerable periods being September to end of November. Council and the community workers are requesting a Licence to use deterrent method for intermittent periods whenever flying foxes return to Burdekin Park. The aim is to persuade mature adult flying foxes returning to the park to move on to a more suitable habitat as soon as they return. It is widely understood that the process of removing and keeping the bats out of Burdekin Park will be a long term project.
9. Is the action to occur on land declared as critical habitat*? *(please tick appropriate box)*	No

10. Threatened species, populations or ecological communities to be harmed or picked.	Scientific Name	Common Name *(if known)*	Conservation Status	Details of no.of individual animals, or proportion and type of plant material *(eg. Fertile branchlets for herbarium specimens or whole plants or plant parts*
	Pteropus poliocephalus	Grey-Headed Flying-Fox	Vulnerable	700 Grey headed Flying Fox
	Pteropus scapulatus	Little Red Flying Fox	Protected (NP&W Act 1974)	

* Critical habitat means habitat declared as critical habitat under Part 3 of the Threatened Species Conservation Act 1995

11. Species impact: *(please tick appropriate box)* a) For action proposed on land declared as critical habitat; or b) For action proposed on land not declared as critical habitat.	Items 12-25 have been addressed			

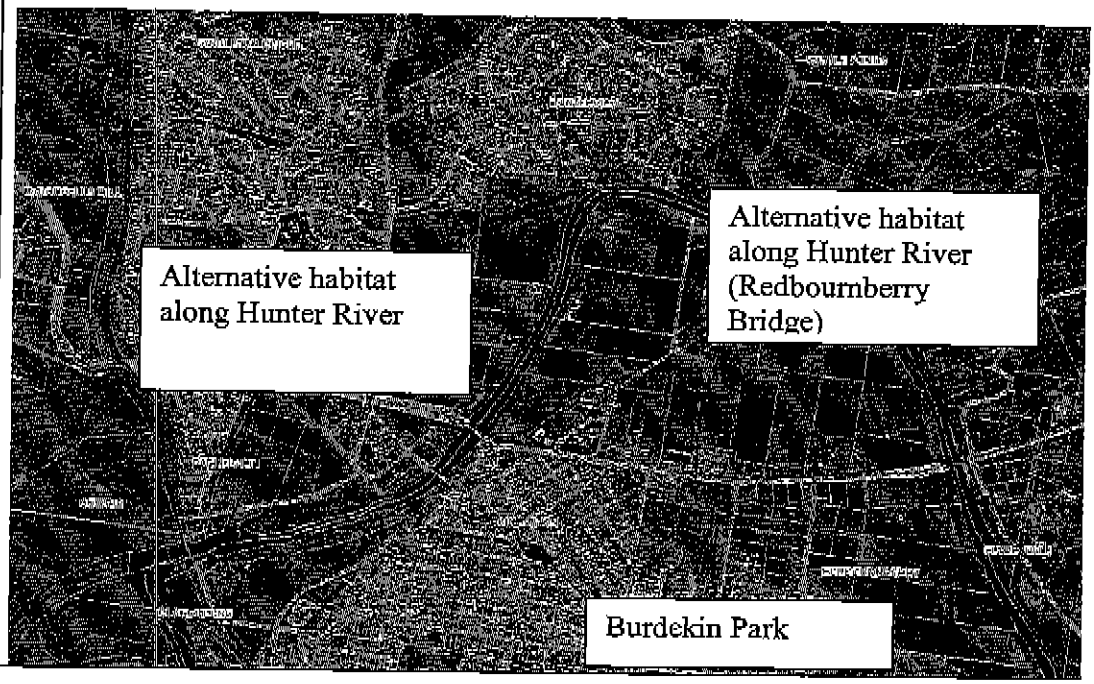
N.B: Provision of a species impact statement is a statutory requirement of a licence application, if the action is proposed on critical habitat. The provision of information addressing items 12 to 17 is a statutory requirement of a licence application if the action proposed is not on land that is critical habitat. Information addressing any of the questions below must be attached to the application.

12. Describe the type and condition of habitats in and adjacent to the land to be affected by the action.	The camp is located in Burdekin Park, an urban park surrounded by residential and commercial areas, and immediately adjacent to the New England Highway. Burdekin Park comprises 1.54Ha of lawn, rose gardens and mature trees, both native (eucalypts, Bunya Pine, Norfolk Island Pine, Hoop Pine, Macadamia etc) and introduced species (African Olive, Jacaranda, *Pinus spp.*). All trees in the park are mature, with many planted in the late 1800's.
13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality *(include reference sources).*	There are no known records of threatened species in the same or similar known local habitat.
14. Provide details of any known or potential habitat for a threatened species on the land to be affected by the action *(include reference sources).*	Because of the urban nature of the site and the highly modified environment of the Park, there is no known or potential habitat for a threatened species on the site. The NSW NP&WS flying fox camps data base shows camps at Cranky Corner (about 23km from Burdekin Park) and at Paterson (about 37 km from Burdekin Park). Both sites were investigated;-

	Cranky Corner camp. The site was visited by the applicants and the land owner Mr Alan Thomas. No flying foxes were found camped at the site. The site is a large gully on the south east side of a ridge. The upper part of the gully vegetation is typified by spotted gum/iron bark plant community. Some of these trees were in flower at the time of the visit on the 8 April 2005. Many of the trees are very large. Lower down the valley there are other bat food trees e.g. Port Jackson fig. Lower down the gully eventually opens up to cleared grazing land and a track (Cranky Corner Road). The clearing was carried out many years ago. The site is located on Mr Thomas's property which is over 1000 acres. Mr Thomas has owned the land for many years and his father before him. Mr Thomas advised he intends to continue operating the land as a cattle grazing property. **Paterson camp.** The camp is located on Cabbage Tree Creek near Webber Creek Road approximately 4 km west of Paterson. Because of the difficulty obtaining owners consent the site was not visited.
15. Provide details of the amount of such habitat to be affected by the action proposed in relation to the known distribution of the species and its habitat in the locality.	In the Hunter, colonies of GHFF are known to exist in Burdekin Park, Cranky Corner (via Stanhope) and Wingham Brush. According to the NSW NPWS Atlas of NSW Wildlife, GHFF have been recorded around Putty (bordering Wollemi NP), Singleton, Ravensworth, Lochinvar and west of Muswellbrook on the edge of Barrington Tops NP. Colonies also exist in the Sydney and Melbourne Botanic Gardens, Fitzroy Gardens, MacLean, Grafton and Bellingen. Other colonies probably occur in lower profile areas. The aim is not to completely remove the colony from the local area. The aim of the deterrents is to remove the flying foxes from Burdekin Park and to encourage them to use an alternative local site where their presence will not conflict with other users. An example of an alternative site is the riparian vegetation zone along the Hunter River.
16. Provide an assessment of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species.	A system needs to be in place so the GHFF can be discouraged from returning after winter and roosting. The operation of the deterrents will be timed so that it occurs in early spring and when the GHFF colony would normally be dispersing, that is, after juveniles have been weaned and are self-sufficient. This is in recognition of the GHFF's tendency to spontaneously abort pregnancies and for flightless juveniles to panic and fall from the roost. Repeated use of the deterrents over several mornings should create enough passive disturbance for the GHFF to relocate to an alternative roost. The system will be implemented until all flying foxes have left Burdekin Park and the Singleton urban area. As part of the project, Singleton Council intends to improve the habitat value of the alternative site previously used by the GHFF, by planting

	suitable habitat trees where possible. This work has already commenced in Clydesdale Reserve to the east of Singleton.
17. Provide details of possible measures to avoid or ameliorate the effect of the action.	In April 2007 Council has received a grant of $200,000 from Xstrata coal to improve the riparian zone of the Hunter River from Rose Point Park to Redbournberry bridge, a length of over 5.8 km of river banks. Much of the river bank land is reserve, and unsuitable for residential development. The grant money from will be partly used to create fauna and flora habitats, specifically for grey headed flying fox. The new habitats are between 2-5km away from Burdekin Park, and are on the river flight path for flying fox . Over the past few years riparian enhancement vegetation has been planted at Rose Point Park and Redbournberry Park, the trees being suitable habitat for flying fox. The GHFF do have alternative roost sites, other than Burdekin Park or other urban exotic trees in Singleton CBD. The deterrent methods are aimed to create a nuisance to the flying fox colony, and after repeated use over time, deter the flying foxes from roosting in Burdekin Park. The operation of deterrent methods is not meant to startle or cause distress but to create an unpleasant atmosphere in Burdekin Park and encourage the flying foxes to seek alternative sites. Currently investigations are underway with the Department of Lands regarding opportunities for habitat creation projects on other parcels of crown land along the Hunter River.

	. Map showing existing roosting site at Burdekin Park, and alternative sites, where intensive habitat creation projects have been created and are continuing



N.B: The Director-General must determine whether the action proposed is likely to significantly affect threatened species, populations or ecological communities, or their habitats. To enable this assessment the Applicant is required to address items 18 to 25. Information addressing any of the questions below must be attached to the application.

18. In the case of a threatened species, whether action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.	The timing of the deterrent will be determined so as not to disrupt the breeding cycle of the GHFF. The aim of the deterrent methods are to encourage the flying foxes to move on as soon as they return, deterring mature bats from returning to Burdekin Park to roost and breed and encouraging them to find a more suitable habitat. For relocation attempts the deterrent methods are aimed to cause minimal distress to the flying foxes which would not place the colony at risk of extinction.
19. In the case of an	NA

endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction	
20. In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:	
(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or	The deterrent will effectively modify the suitability of Burdekin Park as a GHFF camp. However, the passive disturbance will be contained within a small area (~1.5Ha) so as not to impact upon local foraging sites.
(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction	The disturbance will not substantially and adversely modify the ecological community. The deterrent will just make it unattractive to roost within trees at Burdekin park. Other potential foraging and roosting sites along the Hunter River will not be impacted, but will become more attractive as roosting sites,
21. In relation to the	

habitat of a threatened species, population or ecological community:	
(i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and	Habitat will not be removed by using the deterrent, it will be modified by the D-ter application, making it an unpleasant habitat which makes the bats want top roost else where.
(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and	The area known as Burdekin park is highly modified park environment. It is a stand alone man made urban environment comprising of mature exotic and native trees. It is not a naturally occurring habitat for flying foxes.
(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long term survival of the species, population or ecological community in the locality	The use of the deterrent will modify the parks environment, so it becomes an unattractive place for the flying foxes to roost. It will not affect the long term survival of the species, as there are close by other suitable native habitats.
22. Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).	Critical habitat will not be affected by this operation.
23. Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.	The actions proposed is consistent with the objectives of a recovery plan, by encouraging the bats to live in natural safe environments, rather than an urban park environment Singleton LGA is bounded by Mt Royal National Park and the Yengo/Wollemi complex. Suitable GHFF habitat does exist in these areas but the presence of GHFF is unknown. The Atlas of NSW Wildlife records GHFF on the perimeter of Wollemi and Barrington Tops NP and at other locations around Singleton as listed in Q15.

24.Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.	The deterrent actions will not increase the impact of a threatening process, due to other suitable environments close by where the bats can safely live.

Important Information for the Applicant

Processing times and fees

The *Threatened Species Conservation Act 1995* provides that the Director-General must make a decision on the licence application within 120 days where a species impact statement (SIS) has been received. No timeframes have been set for those applications which do not require a SIS. The Director-General will assess your application as soon as possible. You can assist this process by providing clear and concise information in your application.

Applicants may be charged a processing fee. The Director-General is required to advise prospective applicants of the maximum fee payable before the licence application is lodged. Therefore, prospective applicants should contact the NPWS prior to submitting a licence application.

A $30 licence application fee must accompany a licence application.

Protected fauna and protected native plants*

Licensing provisions for protected fauna and protected native plants are contained within the *National Parks and Wildlife Act 1974*. However, a Section 91 Licence may be extended to include protected fauna and protected native plants when these will be affected by the action.

If you are applying for a licence to cover both threatened and protected species please provide the information requested in Item 10 and a list of protected species and details of the number of individuals animals or proportion and type of plant material which are likely to be harmed or picked.

Request for additional information

The Director-General may, after receiving the application, request additional information necessary for the determination of the licence application.

Species impact statement

Where the application is not accompanied by a SIS, the Director-General may decide, following an initial assessment of your application, that the action proposed is likely to have a significant effect on threatened species, populations or ecological communities, or their habitats. In such cases, the *Threatened Species Conservation Act 1995* requires that the applicant submit a SIS. Following initial review of the application, the Director-General will advise the applicant of the need to prepare a SIS.

Director-General's requirements for a SIS

Prior to the preparation of a SIS, a request for Director-General's requirements must be forwarded to the relevant NPWS Zone Office. The SIS must be prepared in accordance with section 109 and 110 of the TSC Act and must comply with any requirements notified by the Director-General of National Parks and Wildlife.

Certificates

Protected fauna means fauna of a species not named in Schedule 11 of the *National Parks and Wildlife Act 1974*. Protected native plant means a native plant of a species named in Schedule 13 of the *National Parks and Wildlife Service 1974*.

If the Director-General decides, following an assessment of your application, that the proposed action is not likely to significantly affect threatened species, populations or ecological communities, or their habitats, a Section 91 Licence is not required and the Director-General must, as soon as practicable after making the determination, issue the applicant with a certificate to that effect.

N.B: An action that is not required to be licensed under the Threatened Species Conservation Act 1995 may require licensing under the National Parks and Wildlife Act 1974, if it is likely to affect protected fauna or protected native plants.

I confirm that the information contained in this application is correct. I hereby apply for a licence under the provisions of Section 91 of the *Threatened Species Conservation Act 1995*.

[redacted]

Applicant's Signature: [redacted]

Date: 16-4-07

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Proposed Methodology 2007

It is proposed that approval be granted for a variety of methods using. One being a water dissolved product called D-Ter which would be sprayed onto tree foliage and branches, This would allow an appropriate method depending on the circumstances, for example the number of flying foxes returning or current season, and the resources available at the time of return.

Council is seeking approval to apply the following methods:-
In a combination or separately to best encourage the flying foxes to relocate.

Method One – Use of D-Ter

D-Ter is a product made from:
997.3g/kg Aluminium ammononium sulphate
1.5gm/kg Sucrose octa-acetate,
0.1g/kg denatonim benzoate
It is not classified as a dangerous good, has no sub risk, and is not required to be listed as a poison.
Material safety data sheet and accompany documents are attached.

A cherry picker will be used to reach above the tree canopy; the D-ter will be applied using a pressure spray at the rate of 100g/litre of water onto the tree braches, stems and leaves. This will be completed when the least number of bats are present, so as not to spray the bats.

"D-Ter is very safe- there is no withholding period and it is not a scheduled poison. It is effective and registered for use against all animals and birds
D-Ter repels by creating a feeling that the treated area is unsafe and threatening. This is reinforced when they quickly leave and the feeling disappears. Thus not only are they harmlessly repelled but the effect lasts far far longer than the D-Ter itself" (Ref Lorac Australia Pty Ltd) manufacturers of D-ter.

In addition to the above mentioned procedure it is proposed that approval be granted for a variety of methods using sound equipment, water, projectiles and lighting to remove the flying foxes when they return. This would allow an appropriate method depending on the circumstances, for example the number of flying foxes returning or current season, and the resources available at the time of return. Council is seeking approval to apply the following methods:-

Method 2 – Use of a Sound Deterrent System

- Speakers to be mounted at various sites in the tree canopy.
- 'Mobile' speakers which can be moved around amongst the colony in

an Elevated Work Platform such as a cherry picker or on the ground.

- Staff to trial other noises by mechanical means; banging objects against a sheet of corrugated iron, horns, alarm sounds, bat blasters, gas guns, modified motor mowers and whipper snippers and other noise emitting devices.

The sound system will be operated for intermittent intervals which vary in duration, and will include audible sounds and higher frequencies which are inaudible to humans. The deterrent will operate at an appropriate volume and frequency to create a passive disturbance in the camp without creating panic amongst the GHFF.

Method 3 – Use of a Hose from an Elevated Work Platform or Other

- A 1 inch hose (approx. 70m length) connected to a mains water supply.
- EWP's would be used to gain the required height in the tree canopy
- Flying Foxes would be hosed down from an operator in the EWP, which would move to different sites in the park. It may be necessary to operate two or more EWP's at the one time.
- Due care will be taken by the operator not to injure the flying foxes. This outlined method has proven to be safe as it was implemented by Council on April 23 and 24 2003 with no flying fox injury.
- The process would begin at an hour and a half before dawn and would continue throughout the day at intermittent intervals.

Method 4 – Use of a Fire Hose From Ground Level

- A fire hose connected to a pressure pump with a 25mm or 38mm jet nozzle operated from ground level.
- The water pressure and nozzle size which would reach the colony without harming the flying foxes. Due care will be taken by the operator not to injure the flying foxes and the operator will use a sweeping method with the hose initially directed away from the colony and gradually moving towards the roosting flying foxes.
- The process would begin before dawn and would continue throughout the day at intermittent intervals.

Method 5 – Installation of Lighting

- Installation of lighting towers under the flying fox colony. The lighting towers will be extended to 8m in height and the lights adjusted to shine onto the roost sites.
- Hand held spotlights would be directed at the flying fox colony.
- The lighting would commence before dawn and would be switched off

at daylight.

Method 6 – Projectiles

- Projectiles such as "Bird rite" 12 gauge shotgun shells that have no pellets and produce a large noise.
- Due care will be taken by the operator not to injure the flying foxes, however it would be impossible to insure no bats were injured during this process.
- The process would begin before dawn and would continue throughout the day at intermittent intervals.
- Bird frite cartridges will be used by licensed operators, at very specific times, so the public is pre-warned. Upon approval of this method, NSW Police Fire Arms Registry are likely to grant Council permission to use the Bird frite cartridge which is discharged from a Fire Arm by a licensed operator at approved times. Times being mornings and specific times throughout the day. The public will be notified by Newspaper advertisements and letters and exclusion zones will be enforced around the park during the use of birdfrite cartridges.

Method 7 – Use of Other Alternative Methods

- Installation of helium balloons, cardboard cut-out men, scare hawks, mirrors, CD's and other bright objects in the tree canopy. These would be installed and remain in the tree canopy.
- Produce smoke by burning green gum leaves, or other suitable materials, to disturb the bats, or using a smoke misting machine.
- Other methods that may arise. These methods would only be used if they would not injure the GHFF.

The park will be monitored daily for the return of the bat colonies. It is considered that a bat carer is not required due to the maturity and experience of those involved. Upon return of the flying foxes, Council's Manager Parks & Facilities will be immediately notified to determine which method is to be used. The most effective method will be used based on current available resources and the specific set of circumstances surrounding the return of the flying foxes. It is hoped that by initiating a response to the return as quickly as possible, allowing for a thirty minute rest time, the bats will move on soon after returning thereby discouraging them from roosting in Burdekin Park.

Observation
The park will be monitored daily for the return of the bat colonies. It is considered that a bat carer is not required due to the maturity and experience of those involved. Upon return of the flying foxes Council's Manager Parks & Facilities will be immediately notified to determine which method is to be used. The most effective method will be used based on current available