# Appendix 3

# Research and Monitoring Plan for the relocation of Grey-headed Flying-foxes from the Royal Botanic Gardens, Sydney

## In response to DECC S95(2) Conditions for approval Condition 5 – Development of monitoring program(s)

The research and monitoring plan is an amalgamation of the research proposals presented to the BGT by independent flying-fox researchers from Sydney and Melbourne. The plan will be coordinated by Rodney van der Ree, principle flying-fox ecologist for the relocation of GHFF from Royal Botanic Gardens Melbourne (RBGM), in conjunction with researchers based in Sydney (to be determined). The researchers are responsible for providing frequent updates on the flying-foxes' movements and reproductive output to the BGT's Flying-Fox Project Officer. The project officer will also gather information from RBGS staff and volunteers involved in the monitoring phase, and notify the Director of RBGS and the Executive Director of the BGT of any concerns regarding GHFF welfare, so that dispersal methods can be amended or halted quickly as required. The Flying-Fox Project Officer (project co-ordinator) will compile fortnightly reports to the BGT and DECC, while the researchers will produce reports to be submitted after assessment of reproductive success in the 2009/10 season, approximately 6 months after the relocation, and at the end of the relocation. The methodology will be reviewed for efficacy, at the end of the major relocation effort (end of July), and at the end of the reproductive season, and repeated for a total of three years, or for as long as required by the DECC and/or DEWHA. Research will commence in May/June 2009, whether or not approval for relocation is granted for 2009. If relocation is delayed, the research data will still be useful in camp management and for any future relocation. However, the research timeline has been devised to allow relocation in May-July 2009. The research will be carried out subject to approval from the DECC Animal Ethics Committee under the *Animal Research Act 1985* and the *Australian code of practice for the care and use of animals for scientific purposes.*

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## *1. Background*

Grey-headed Flying-foxes, *Pteropus poliocephalus* have a traditional roost at the Sydney Royal Botanic Gardens. Although there are records of this site being used by flying-foxes dating back over a hundred years the occupation patterns have been spasmodic until the last fifteen years when the flying-foxes have increasingly used The Gardens as a typical "traditional" summer site where large numbers of animals appear during spring, fluctuate in numbers from then until late autumn and then depart leaving a smaller fluctuating colony over winter.

Although the spasmodic usage of The Gardens site before 1986 is probably a result of human persecution the recent increase in the usage of this site is in line with the increased formation and use of urban sites throughout the distribution of *P. poliocephalus* (Parry-Jones 2000). It is thought that this increased usage is a result of the greening of the cities over the last twenty years plus increased habitat destruction in more rural areas (Parry-Jones and Augee 2001). The year long occupation of the urban sites is particularly linked to the planting of wintering food trees in urban areas as the vegetation prior to European settlement would not have supported a winter colony (Benson and Howell 1990).

The Gardens site is one of at least 10 within the Sydney catchment (Smith 2008). Other sites are at regular intervals throughout the distribution of *P. poliocephalus* (Ratcliffe 1931). The attraction of The Gardens appears to be linked to its close access to foraging sites in eastern and south-eastern Sydney. Radio-tagged flying-foxes from The Gardens were found foraging predominantly within 5km of the site however one was found as far away as Kurnell and all "disappeared" within two months (Burton 2007). These disappearing animals plus the extreme fluctuations in numbers recorded at The Gardens site indicate that there is considerable turnover of animals: some animals apparently stay for months while others may stay for only a night (Divljan 2008). In fact "the colony" is not a specific group of individual flying-foxes rather it is just the animals that are roosting at the site on a particular observation.

Very little is known about the mechanisms involved in the formation of a colony. Flying-foxes were flying from Gordon to The Gardens and Lady Macquarie's Chair to forage in Centennial Park in the 1980s (Spencer et al 1991) and yet the colony only started to form in 1989. Similarly little is known on what happens to the colony if a relocation attempt occurs in an urban environment where there are other colony sites in easy flying range. *P. poliocephalus* is listed as vulnerable under both State and Federal Legislation

and so it is necessary not only to determine how the flying-foxes react to the relocation but what effect, if any, it has on their health and reproductive ability.

## *2. Project outline*

To study the effect of the relocation on the RBGS camp it is necessary to define the extent of the population that is to be monitored (Divljan 2008). As a large number of the flying-foxes at the RBGS are transient and it is likely that there is considerable (possibly daily) interchange between the RBGS colony and the other Sydney colonies (as Spencer et al 1991 found around the Mt Kembla/Jamberoo area), the population studied has to include more than the RBGS site. We propose that the population under study should be that of the Sydney flying-foxes found within 30km of the RBG. This includes the known colonies and probably foraging range of Wolli Creek (10.43km), Gordon (13.47km), Kurnell (17.71km; has vacated this site), Clyde (18.61km), Parramatta (21.22km), and Cabramatta (25.97km) (Smith 2007), and Kareela (20 km).

The project would monitor the effect of the relocation and the monitoring itself should not add to whatever effects the relocation would cause the flying-foxes. Hence it has been decided not to catch and process the animals during or after the relocation and to determine the condition and reproductive output remotely.

### *2.1 Study Objectives and Proposed Methods*

1. To mark a subsection of the population resident at the Gardens directly before the relocation and attempt to follow them through the relocation process.

   *Method:*

   - For 2 weeks before the disturbance, catch at fly-in approximately 30 animals/day at the RBGS (Total of approximately 400 animals), according to established protocols (Divljan 2008) and under existing Ethics Committee approvals with the relevant amendments (Researchers).
   - Take observations, measurements and samples to determine sex, age (from tooth wear), reproductive and physical condition of the caught bats (Researchers).
   - Release the bats at point of capture with an Australian Bird and Bat Banding Scheme (ABBBS) band and coloured band that has a colour indicative of The Gardens site (yellow) on the opposing thumb to the ABBBS band (Researchers).

- Radio collar 50 flying-foxes and follow them throughout the relocation (Researchers).
- Search Sydney colonies and any dispersed groups of bats thought to be from the RBGS for coloured banded flying-foxes (RBGS Staff and volunteers).

2. To determine the usage of colonies within the study area before and after the relocation.

   *Method:*

   - Undertake weekly counts of all colonies (including the RBGS) within the 30km radius for at least two weeks before the relocation according to the method in Parry-Jones and Augee 2001 (Researchers, RBGS staff and volunteers).
   - Survey and count new colonies or groups of roosting flying-foxes that form during relocation on a daily basis, and determine presence/absence of coloured banded bats (RBGS Staff and volunteers).
   - Count traditional colonies and any new colonies within the study area at regular intervals, and search for bats with radio-collars within each colony (Researchers, RBGS staff and volunteers).

3. To determine the degree of stress of Sydney colonies prior, during and after relocation, through the comparative assessment of faecal steroid measurements and reproductive output at treatment populations (i.e. those within 30 km of Sydney, where the RBG flying-foxes are likely to have moved to), and control/reference populations at the outskirt of Sydney. This is a long-term study aimed at producing a baseline of cortisol or corticosterone levels for GHFF at different times of the year. Whilst this research does not contribute to the decision on when or how to mitigate or stop disturbance during the primary relocation period (May-July), it is likely to produce a non-invasive monitoring strategy for GHFF in the future.

   *Method:*

   - Reproductive output assessed as proportion of females carrying young by randomly sampling 20 groups of 10 females in each camp (Researchers, RBGS staff and volunteers).
   - Before, during and after relocation collect multiple samples of fresh faecal specimens from control and treatment camps, and freeze until ready for analysis (Researchers).
   - Assay for cortisol or corticosterone depending on what is most appropriate and test for statistically significant differences between samples (Researchers).

### *2.2 Estimated budget for research to 2009/10 breeding season*

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|---|---|
| **Researchers** | |
| R. van der Ree – Principal Investigator<br>Kerryn Perry-Jones, Peggy Eby and associated researchers – Associated Investigators | 30,000 |
| **Catching and Tracking Equipment** | |
| Equipment to Catch Flying-foxes | 5,000 |
| Bands Coloured Anodised Bands (for 400 bats) | 400 |
| 50 Radio Collars ($300 each) | 15,000 |
| Field work costs (petrol and use) of personal car | 4,600 |
| Bands ABBBS and Receiver | No cost |
| *Sub-Total* | *$25,000* |
| **Stress Hormone Measurement** | |
| Faecal Analysis (for 350 bats). | *5,000* |
| ***Total*** | ***$60,000*** |

## *3. Monitoring disturbance*

A perimeter will be established around the RBGS camp during daytime disturbances, and signage posted to direct visitors away from the camp. Public safety is not an issue for pre-dawn dispersal because the RBGS is still closed to the public. Staff will be available to provide information to the public prior to evening dispersals, as well as assist in the unlikely situation of an interaction between the public and flying-foxes. The potential for conflict between the relocation program and public activities will be minimised by liaising with the events co-ordinators and keeping the event co-ordinators informed of dispersal activities.

All staff and volunteers involved in disturbance activities will be required to keep a log of every disturbance, including date, time, location, method (e.g. visual, acoustic), duration, equipment used, volume/intensity, names of the people involved, and their roles.

The BGT has commissioned ArupAcoustics to produce an Environmental Noise Management Plan, and will provide training and protocol to staff and volunteers regarding the disturbance intensity of various equipments, the maximum allowable noise level etc, and to ensure that disturbance activities comply with relevant legislations.

## *4. Monitoring camp size*

The number of flying-foxes (or 'bats') within a camp is counted or estimated using static or fly-out counts. Static counts are conducted during the day, where an observer walks around or through the camp and counts or estimates the number of roosting flying-foxes. Fly-out counts are conducted at dusk, where observers strategically positioned around the camp count or estimate the bats as they fly out from the roost. Fly-out counts require multiple people, and the minimum number depends on the size of the colony and the number of streams that the bats form as they leave the camp. Six to eight observers would be a reasonable minimum number of observers required to conduct a reliable fly-out count for most camps. Neither counting method produces an accurate estimate of camp size, however if conducted reliably, they should provide a repeatable estimate that can provide a trend in camp size.

Fly-out counts are conducted periodically by trained volunteers at camps around Sydney, including the RBGS and the Ku-ring-gai Flying-Fox Reserve in Gordon. Fly-out counts were implemented at the RBGS in February 2008, and will continue to take place once or twice per month up until the dispersal commences, after which they will cease. Fly-out counts are unlikely to be reliable or effective after dispersal as fly-out patterns may be modified by the disturbance. Furthermore, the evening dispersal will also modify fly-out patterns, further complicating the fly-out count. Fly-out counts are also not feasible at every potential new camp location because (i) the logistic difficulties in directing volunteer counters to each new camp at short notice; and (ii) it takes a number of fly-outs to determine the most efficient locations to station each observer.

To combat the issues with fly-out counts, we will undertake static counts at RBGS and the other camps, where possible. The RBGS has conducted static counts for over 15 years, and static counts are conducted periodically at camps in Kareela and Parramatta, which will facilitate comparisons of camp sizes before and after the relocation. Follow up consultation with camp or land managers has shown that flying-foxes at certain camps, such as Cabramatta Creek, Ku-ring-gai Flying-fox Reserve, Clyde and Wolli Creek, are unaccustomed to human presence and therefore very sensitive to disturbance. Fly-out counts will be conducted at these camps to minimise disturbance to the flying-foxes. Camp surveys will be undertaken at least twice a week for at least two weeks prior to the relocation commencing, coinciding where possible with fly-out counts. Once the relocation has started, daily static counts will take place at the RBGS; surveys will be conducted at least twice a week at each location where the flying-foxes from the RBGS are known to have gone or are likely to have gone. Once disturbance stops, the counts in locations where the bats remain will continue twice a week with survey teams for as long as considered necessary in consultation with the landholder, and then will gradually be reduced in frequency to that of fly-out counts currently occurring at RBGS (i.e. approximately monthly). Monthly monitoring will continue for as long as the batteries in the radio collars last (~ 16 months). Survey teams will consist of volunteers and/or staff trained in

static and/or fly-out count methodology, and at least one staff member trained to handle injured bats or abandoned pups.

We will also contribute the results of the relevant weekly counts taken of Sydney camps, to the research being undertaken by Billie Roberts (Ph.D. candidate, Griffith University), who collects monthly count information from camps throughout NSW and VIC.

The RBGS will implement an ongoing maintenance program, where the number of flying-foxes roosting in the RBGS will be assessed and recorded on a daily basis indefinitely. All monitoring records will be made available upon request.

## *5. Monitoring distribution of GHFF*

The bats dispersed from the RBGS are likely to temporarily roost in numerous locations across Sydney until they establish a new camp in a suitable location, or join up with other existing camps. The major camps in Sydney are found in Ku-ring-gai Flying-Fox Reserve, Gordon (13.47 km from RBGS) and Cabramatta Creek (25.97 km). However, GHFF are found in other camps in Wolli Creek, Clyde, Parramatta, and Kareela. Camps may be annual/seasonal or irregular (not always occupied, e.g. Oatley in Hurstville).

The location of each new camp will be identified and mapped by BGT staff with the aid of GPS devices, enabling managers to quickly and accurately follow the movement of the flying-foxes across Sydney. The movements will be monitored through radio-tracking, camp counts (see above) and with sightings reported by the public to the 24/7 bat hotline.

The primary method of monitoring the movement of the bats dispersed from RBGS is by radio-tracking. Up to 50 adults will be fitted with radio-transmitters and their location determined each day. These 50 adults will be fitted with transmitters prior to the relocation so their ‘normal’ movement patterns between Sydney camps can be observed. The animals with transmitters will be located each day by standing at the edge of camps and determining the presence or absence of each individual. This is done on foot, usually from a high point above the colony. As the intention is to determine presence or absence, not their position within the camp, it is relatively quick to determine if a signal is present within a camp or not. It will become more time-consuming as the bats disperse into other camps, but determining presence or absence within a camp during the day is still relatively quick. Transmitters will have a built-in mortality sensor, which changes the pulse-rate of the transmitter if it has not moved for more than a set period of time (e.g. 12 hours). This will enable us to determine if the transmitter has been removed from the animal, or if the animal has died within the camp.

Radio-tracking the bats to their roost will be undertaken daily for at least one week prior to the relocation commencing, until most bats have settled into a new roost location following the relocation. Radio-tracking will then be

reduced to weekly after the bats have either formed a new camp in an appropriate site or joined existing camps, until the batteries fail (~ 16 months).

We have identified that 50 flying-foxes will need to be fitted with transmitters because this is twice the number that were tracked during the relocation of GHFF from the RBG Melbourne in 2003. In that project, the 24 bats fitted with transmitters provided a detailed enough resolution to follow the movement of bats around Melbourne. This number is insufficient in Sydney because we expect the bats from the RBGS to join existing camps, rather than form a new camp. Therefore, we need more bats than was used in Melbourne to ensure we have a large enough sample size to follow should the RBGS camp disperse and join multiple existing camps. With an approximate camp size of 5000 expected in May/June 2009, 50 bats accounts for 1% of the RBGS population. Fifty bats with transmitters is also the maximum number of bats that can be realistically tracked each day.

Approximately 400 bats will be colour-banded concurrently (at least 1 week before relocation) to facilitate long-term monitoring of movement patterns. Colour-banding provides an economical method to identify a large number of individuals relative to radio-tracking; bands are likely to last for the life of the bats, which will allow for long-term research, as well as facilitate reporting by the general public, whether the animal is dead or alive. Colour-bands may be hard to detect, especially when bats roost in very tall trees. Therefore, a higher number of individuals are required for banding than for radio-tracking; 400 individuals represent almost 10% of the RBGS population and the number was deemed sufficient based on past research. Both projects will be carried out for 6 months, and the results of the initial relocation phase presented to DECC and DEWHA. Surveys of camp size will continue on a monthly basis for as long as the batteries of the radio collars last (~ 16 months), then BGT will seek advice from DECC and/or DEWHA on the timeframe of further commitment. Breeding methodology will be reviewed for efficacy at the end of the 2009/10 breeding season, and repeated for a total of three breeding seasons, or for as long as required by DECC and/or DEWHA.

The location and size of each camp will be recorded and mapped using a combination of aerial photos and on-site mapping by the monitoring teams with GPS devices, and/or with the aid of land managers familiar with the site. The location of all temporary roosts that the bats use during the relocation will also be mapped, including the number of bats occupying the site and the spatial extent of the site, where possible. This will contribute to the knowledge of potential movement or habitat corridors for the GHFF. Large increases or deceases in the spatial extent of a camp (in combination with the counts) will be used as an indicator of the movement of bats among camps and temporary roosts.

The BGT will also use the bat hotline for people to report new groups of roosting bats, large increases or decreases in the size of existing camps, and sightings of banded bats (alive or dead).

**Table 1. Issues to be addressed, and the approach and rationale for the research and monitoring methods**

| *Issue* | *Approach* | *Detail* |
|---|---|---|
| **Where do the bats go?** | Attach radio-transmitters to 50 GHFF (adult, males and females) at RBGS one to two weeks prior to dispersal commencing. | Get daily locations of all radio-tagged bats by searching all known camps and any new camps, in order to determine movements between camps |
| | Band up to 400 bats that are captured. | All bats captured during the relocation will be banded and details submitted to ABBBS. This information will be critical for longer–term monitoring and larger-scale movements. |
| **What impact is the relocation having on GHFF?** | Assess the reproductive output of females at disturbed camps (i.e. all known camps in Sydney area, where the RBG flying-foxes are likely to have settled in), and compare the output with 1) resident females at control or reference camps (i.e. those on the outskirt of Sydney, where impact from the relocation would be minimal); and 2) reproductive output reported by previous research. | Following existing methods (Eby, Pers. Comm.), select 20 individuals at random within the camp, and assess sex of nearest individuals, until 10 females in each group have been identified and their reproductive status recorded. Commence surveys in August 2009 and continuing to April 2010 (i.e. the next breeding season) or longer if disturbance continues. If the number of young produced by relocated females in the 2009/10 breeding season is significantly lower than for females resident in undisturbed camps, then dispersal following the 2009/10 breeding season will be scaled back. |
| **Assess stress levels** | Managers of the RBG Melbourne relocation, Simon Toop and John Nelson, have advised BGT on indicators of stress during different phases of the relocation. E.g. inability to settle down after the 10 min hourly | Observers will monitor GHFF to ensure that only the minimum level of disturbance is used. Daytime disturbance will be scaled back if flying-foxes cannot settle down after a disturbance episode, as continued sleep deprivation may lead to injury and even death. During dispersal, staff will hold |

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| | disturbance; circling with potential of collision during dispersal etc. Site co-ordinators and staff will look for these signs. Disturbance will be modified or halted in response to the level of stress observed.<br><br>The number of dead/injured flying-foxes, including abandoned young and aborted foetuses, will be reported to the researchers named in Appendix 3. The researchers will determine whether the numbers fall within pattern of variability seen in nature. | back on disturbance when flying-foxes start circling instead of flying out, as this may be a sign of confusion and panic, and may lead to injury through disorientation and collision. Abortions can occur for reasons other than relocation disturbance (e.g. shortage of food, inclement weather conditions); however, the detection of a surge of aborted foetuses or deserted young in a camp undergoing disturbance will be evidence of excessive stress. Not all camps can be accessed; therefore, BGT will monitor accessible camps and collate reports from wildlife carer groups to inform decisions regarding the modification or cessation of disturbance activities. |

## *6. Monitoring the impacts of the relocation on GHFF welfare*

The effects of the relocation on the welfare of the RBGS camp as well as surrounding camps will be evaluated. The primary measure of the level of stress upon the bats will be their reproductive output in the 2009/10 reproductive season.

The level of stress experienced by the relocated flying-foxes can only be inferred, not directly measured. Even if we could isolate stress due to the relocation, it is not clear if a certain stress level is high or low, relative to other events within the life of a flying-fox. For example, stress levels during the mating season or the establishment of territories may (or may not) exceed those detected during the disturbance. Thus, while the relocation will probably result in elevated stress levels, it is unknown if those stress levels will result in unacceptable consequences. Secondly, it will be very difficult to recapture one of the 50 individuals we fitted with radio-transmitters or colour-bands. Therefore, we have no way of being sure that the animal we are testing for stress has experienced the relocation from day 1, or whether it is a new arrival to the camp that morning. Third, we do not know what sample size (i.e. number of individuals to be tested) is required to be confident that we are accurately assessing stress across the RBGS colony. Ultimately, the optimal way of assessing stress levels is to do so without intervention. This will be achieved by monitoring reproductive output by females at all camps across

Sydney during the 2009/10 breeding season, as well as at the camp(s) where most of the RBGS appear to have settled for the 2010/11 breeding season. Concurrent research on stress hormone levels within faecal samples collected from disturbed and undisturbed camps in the Sydney region will further contribute to the understanding of the impact of relocation, without creating more disturbances to the GHFF.

Reproductive research at camps in the Sydney metropolitan area (within 30 km of the RBG) will commence prior to the commencement of births in late August/early September 2009. Surveys of pregnant females will take place every 5 days until the first births are recorded, after which surveys will be undertaken once every 10 days to minimise the potential to distress mothers and young. This method is currently used by Peggy Eby in NSW and Rodney van der Ree in Melbourne. Reproductive output will be assessed as the proportion of females carrying young. Using binoculars, a trained observer will randomly sample 20 groups distributed across each camp, and assess 10 females in each group and determine if they are carrying young.

The reproductive surveys will also allow us to identify any large-scale rejection of young by the mothers. This will be evidenced by a significant reduction in the proportion of females carrying young within the camp undergoing disturbance. The loss of young (either abortions during pregnancy or mothers rejecting pups) will also be assessed by targeted searches and incidental observations. The targeted searches will be undertaken by trained staff during day-time searches of the camp. All personnel involved in the relocation will be briefed on what to look for during disturbance to find and identify aborted young or rejected pups and provide incidental observations. The BGT will also liaise closely with local wildlife care groups to ensure that the BGT receives rapid feedback on any significant increase on numbers of flying-foxes coming into care during and immediately after the relocation, and what locations and situations they are found in (e.g. injured on powerlines, malnourished, orphaned young, etc.).

Monitoring of reproductive output in the years following the Melbourne relocation has shown that females produced similar numbers of young in the year (2004-05) immediately following the disturbance (Fig. 1). Although lowered reproductive output may be attributed to disturbances other than the relocation, and mortality of some young is a natural occurrence in any population, the welfare of the GHFF is very important to the BGT. In the unlikely event of a surge of death, injury, abortion or desertion of young, or if reproductive output in 2009/10 is significantly lower than expected or lower than those in camps unaffected by the relocation, the BGT will cease all disturbance activities outside of RBGS immediately and the level of disturbance intensity will be reviewed.

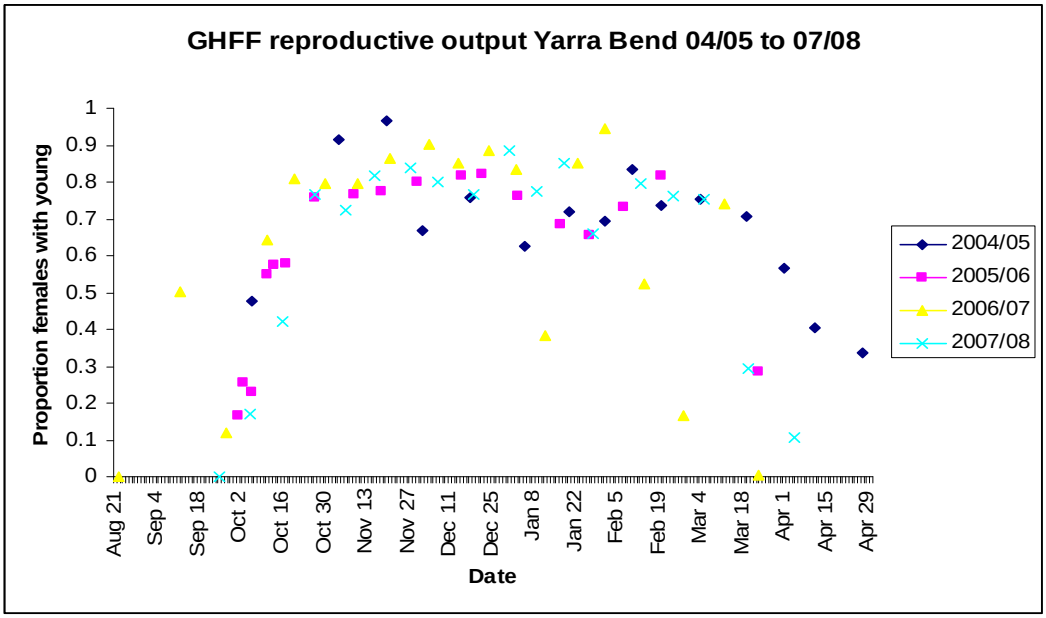


Figure 1. Proportion of females with young at Yarra Bend, Melbourne, during the breeding season from 2004/05 to 2007/08. R. van der Ree unpublished data.

## *7. Monitoring the number of flying-foxes that relocate to unsuitable site(s) and how long they remain*

The BGT will aim to communicate to as many people within the Sydney metropolitan region as possible (including key stakeholders such as local councils and wildlife care groups), that the BGT wants to know where the flying-foxes have relocated. A 24-hour info/help line will be established for people to inform the BGT if flying-foxes start to roost in sites other than established camps, or those deemed appropriate by the Parks and Wildlife Group and the BGT. In each case, the BGT will attempt to ascertain details of the site (e.g. roost tree species, land use, etc.) and its location, how many animals are there, what species they are, whether any are banded, how many are with young, and how long they remain. Records will be kept of all such sightings in a database, and submitted to DECC fortnightly. Those reporting them will be contacted to discuss the appropriate next steps. For example, if the site is considered unsuitable and the flying-foxes are either still there after 2-3 days or if there are 50 or more present, then the BGT will agree to attend the site to move them on (provided it is within the period BGT is licensed to conduct such disturbance). If the site is considered potentially suitable, a site visit may be required to confirm, and if confirmed, negotiations with the landholder and consultation with neighbours will take place.

## *8. Monitoring the function of the new site(s)*

Any new campsites allowed to establish within the Sydney metropolitan region and any existing camps that are recognised as receiving a substantial number of additional flying-foxes as a result of the relocation would be examined to

determine whether the new site(s) provide the same (or better) access to food resources. The BGT will support the managers of these camps to ensure that they are monitored during the 2009/10 breeding season in order to detect any changes in reproductive output from what was previously known at that site (if it was an existing camp), the RBGS site, and other sites around Sydney. These results would also be compared to camps outside of Sydney during the same season to determine whether there are any significant differences. This would be repeated for a total of three years, or for as long as required by DECC and/or DEWHA.

## *9. Reporting*

Regular reporting of the results, particularly the distribution of radio-collared bats and the size of the various GHFF camps, will be critical to the success of the relocation effort. The camp sizes and distribution will be reported to the relocation co-ordinator (flying-fox project officer) on the day of the survey. The effects of the relocation on birth rates etc will be reported by flying-fox researchers to the relocation co-ordinator on a weekly basis. The monitoring teams and researchers will report any observed deaths or injury immediately to the project co-ordinator.

The relocation co-ordinator will submit fortnightly reports to DECC throughout the relocation and monitoring phase for as long as required by DECC. The reports will include camp sizes, disturbance methods and duration, weather conditions etc. The BGT will also notify DECC immediately of any decision to scale back or halt disturbance for any reason. A written report and paper for submission to a journal will be prepared by flying-fox researchers and submitted to a scientific journal at the conclusion of the relocation program.

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