



The Royal
BOTANIC GARDEN
Sydney

**Grey-headed Flying-fox dispersal
from the Royal Botanic Garden, Sydney**

**Eleventh Annual Compliance Report
2023**

**Commonwealth approval: 2008/4646
New South Wales approval: C0004672**

Document Control

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1 INTRODUCTION

The relocation of flying-foxes from the Royal Botanic Garden Sydney (RBG) started in June 2012. The program was implemented because of damage to culturally significant trees and palms. The main relocation of the colony was completed within 10 days.

The following paragraph is paraphrased from the Public Environment Report (van der Ree and North 2009) submitted to the Commonwealth in 2009:

The RBG is a significant cultural and botanical icon for Australia and the world. Located on Sydney Harbour, the RBG contains numerous historic and heritage listed specimens that are of enormous cultural, scientific, horticultural and educational value. In 1989 Grey-headed Flying-foxes (Pteropus poliocephalus, GHFF) established roosting in the Palm Grove, which is the oldest and most significant planted area of the RBG.

Within the RBG, the roosting behaviour of the GHFF colony has contributed to the death of 33 trees and 35 palms prior to the dispersal, primarily through sustained defoliation. Immediately prior to the commencement of the dispersal, an additional 60 trees and palms were assessed to be in a critical condition, due to the damage they sustained. To conserve the significant heritage site that is the RBG, the Royal Botanic Gardens and Domain Trust (the Trust) determined to seek approval to disperse the GHFF colony.

The Trust received a Section 95(2) certificate of conditional approval from the New South Wales Office of Environment and Heritage (OEH) for the relocation and ongoing disturbance of the GHFF from the RBG, effective from 6 February 2009 until 31 December 2014 (Certificate 1097285). Certificate 1097285 was closed by the OEH in 2015. Renewal of the licence was discussed with OEH at the time, and it was agreed that the action was covered by the Commonwealth approval (J. Martin, pers. comm., 19 March 2019). OEH were advised that passive measures were being implemented in March 2019, and a decision was made that a new Threatened Species licence application should be submitted. Following this, a Biodiversity Conservation Licence under Part 2 of the *Biodiversity Conservation Act 2016* was issued by the then Office of Environment and Heritage on 22 March 2019 (Licence No C0004672) until 2039.

The Trust received conditional approval from the Commonwealth Department of the Environment, under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*, effective from 13 May 2010 until 2039 (Approval 2008/4646).

This document is designed to comply with the annual reporting requirements of the NSW and Commonwealth conditional approval. The information reported relates to the implementation of passive measures to prevent GHFF re-establishing roosting within the RBG during the reporting period.

2 UPDATE FOR 2022-23

The 2022-23 reporting period (1 July 2022 to 30 June 2023) represents the eleventh year following dispersal in June 2012. Monitoring takes place on weekdays throughout the gardens as horticulture staff complete their work. During this reporting period GHFF were recorded roosting between 29 March and 4 April 2023 (Figure 1) in Bed 60 of the Palm Grove within RBG. Passive measures were implemented in accordance with the conditional approvals, i.e. pre-dawn noise and spotlights for up to 1.5 hours, ceasing 10 minutes prior to sunrise. The Independent Expert Panel (the Panel, represented by Ian Temby) endorsed implementing passive measures via email on 31 March 2023 to deter roosting. The Independent Observer Group (the Group represented by Lynda Newnam) attended the RBG and verified the GHFF count on 31 March 2023. Passive measures were used pre-dawn to deter roosting between 3 and 6 of April 2023 (Figure 1). No incidents were reported and no GHFF were recorded after two consecutive days of passive measures pre-dawn.

A summary of the field data sheets provided in Appendix A.

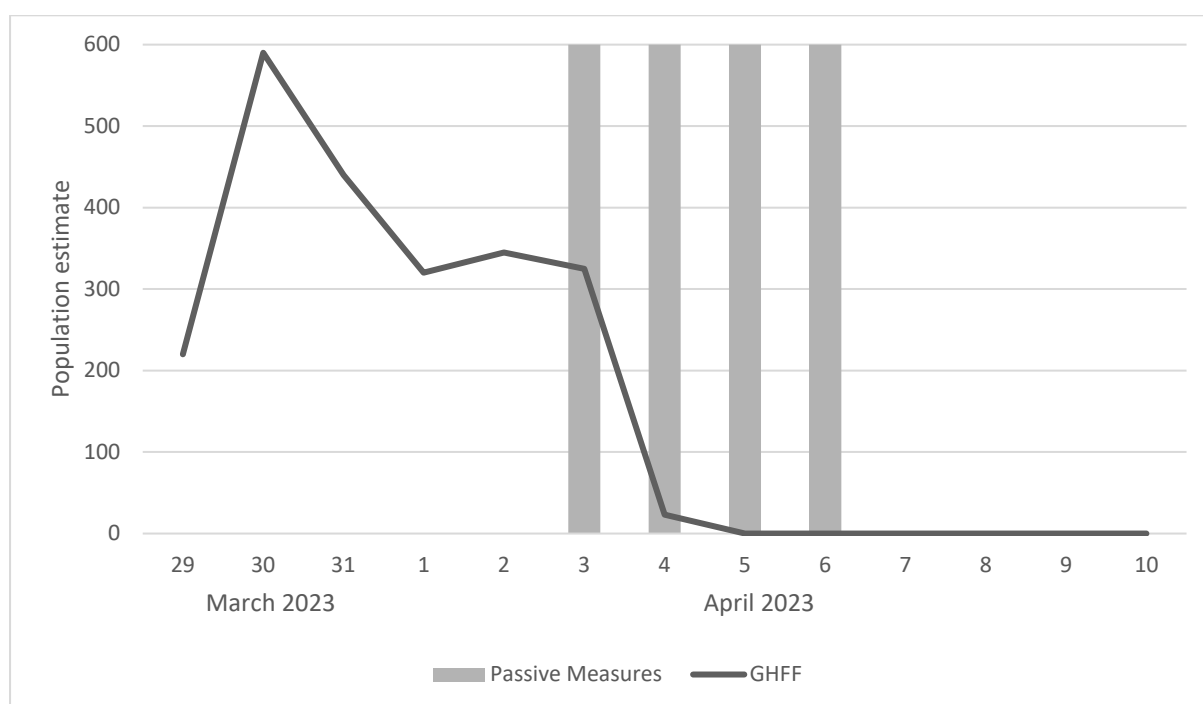


Figure 1 Grey-headed flying-fox roosting activity and implementation of passive measures at the Royal Botanic Garden Sydney for 2022-23.

3 CONCLUSION

The non-resident colony of GHFF was humanely deterred from roosting at the RBG within one week of their presence being detected in March 2023. Four events of pre-dawn noise were sufficient to dissuade the GHFF from the site. Based on this information and reports received from the community:

- no new colonies have been established
- there are no welfare issues to report.

The RBG will continue to be monitored on weekdays and if required, ongoing maintenance deterrence will be deployed to prevent re-establishment of a GHFF colony.

Table 1 Expert Panel sign-off of the 2022-23 annual report.

Annual Report	Submitted to Panel	Endorsed by Panel
Eleventh Report 2022-23	28 August 2023	30 August 2023

Table 2 Observer Group sign-off of the 2022-23 annual report.

Annual Report	Submitted to Panel	Endorsed by Panel
Eleventh Report 2022-23	28 August 2023	3 September 2023

4 PAST DISPERSAL ACTIONS RECORD – RBG FLYING-FOX COLONY

Table 3 Record of grey-headed flying-fox dispersal actions at the Royal Botanic Garden Sydney 2012-2022

Report Year	Dispersal Activities
Tenth Annual Report 2021-22 (Royal Botanic Garden, 2022)	For the 2021-22 reporting period, the tenth year following the dispersal in June 2012, no GHFF were recorded at the RBG. Therefore, no consultation or input was required from the Group or the Panel.
Ninth Annual Report 2020-21 (Royal Botanic Garden, 2021)	For the 2020-21 reporting period, the ninth year following the dispersal in June 2012, one occurrence of noise dispersal took place to disperse five GHFF on the 29 of March 2021. The GHFF had been recorded in the Tropical Horticultural Bends 41a and 41c during monitoring. The GHFF were not considered to be a resident colony by the expert panel. The recommended noise disturbance was aimed to disperse the animals prior to them becoming established on site. Following dispersal, GHFF were not recorded on site for the remainder of the reporting period.
Eighth Annual Report 2019-20 (Royal Botanic Garden, 2020)	For the 2019-20 reporting period, the eighth year following the dispersal in June 2012, noise disturbance was not undertaken at any point. Low numbers of GHFF (< 10 individuals) were recorded roosting in Palm Grove in May 2020, though small numbers of individuals left of their own accord and disturbance was not required.
Seventh Annual Report 2018-19 (Royal Botanic Garden, 2019)	For the 2018-19 reporting period, the seventh year following the dispersal in June 2012, pre-dawn noise was undertaken on 39 days to deter GHFF from roosting at the RBG between 7 Feb and 7 April 2019. Pre-dawn noise activities were undertaken daily when bats were observed roosting in the Garden, depending on availability of staff. The peak number of daytime roosting animals was 205 bats on 8 March 2019.
Sixth Annual Report 2017-18 (Royal Botanic Garden, 2018)	For the 2017-18 reporting period, the sixth year following the dispersal in June 2012, roosting of less than 10 individuals occurred on less than 10 days (generally one individual). No noise was made to prevent GHFF from re-establishing roosting within the RBG, and the small number of individuals roosting left of their own accord.
Fifth Annual Report 2016-17 (Royal Botanic Garden, 2017)	For the 2016-17 reporting period, the fifth year following the dispersal in June 2012, roosting occurred on three separate occasions totalling 88 days (24, 60 and 4 days, respectively) and passive measures (including noise and lights) were implemented on 29 days to deter GHFF from re-establishing roosting within the RBG.
Fourth Annual Report 2015-16 (Royal Botanic Garden, 2016)	For this reporting period, 2015-16, the fourth year following the dispersal in June 2012, no roosting occurred, and no passive measures (including noise and lights) were implemented.
Third Annual Report 2014-15 (Royal Botanic Garden, 2015)	Passive measures, in the form of pre-dawn noise deterrence, were used on 34 days during the period 18 June 2014 to 17 June 2015. The number of GHFF counted pre-dawn flying-over the RBG, possibly attempting to roost, had been highly variable. During this reporting period GHFF were observed to roost on 32 days, with a maximum of 60 and an average of 13 animals observed. A consistent period of roosting occurred from late August into September (2014). Following consultation with the

Report Year	Dispersal Activities
	Expert Panel the methods approved in 2013, the implementation of passive measures until sunrise, were again approved. In general, noise was stopped 10-minutes prior to sunrise. This occurrence highlights that GHFF may attempt to resume roosting within the RBG at any point in the future.
Second Annual Report 2013-14 (Royal Botanic Garden, 2014)	<p>Passive measures, in the form of pre-dawn noise deterrence, were used on 206 days during the period 13 June 2013 to 17 June 2014. The passive measures employed are consistent with the noise and lights used during the primary relocation. Over the course of the program the intensity had decreased, specifically the number of staff operating on-ground and the frequency that disturbance has been implemented.</p> <p>The number of GHFF counted pre-dawn flying-over the RBG, possibly attempting to roost, has been highly variable. GHFF were observed to roost within the RBG on 33 occasions, 13 of which involved less than 10 GHFF. A consistent period of roosting occurred from late October through November (2013).</p>
First Annual Report 2012-13 (Royal Botanic Garden, 2013)	The action commenced on 4-06-12 following compliance with condition 2. The predawn and sunset noise deterred the GHFF from roosting within the RBG within 10-days. At this time the panel approved the use of passive measures to deter the re-establishment of GHFF roosting within the RBG, under condition 10. The passive measures included the existent relocations methods, including pre-dawn noise disturbance, within the scope of condition 4b.

5 LEGAL CONSENTS

5.1 Commonwealth approval conditions

The Trust received conditional approval from the Commonwealth Department of the Environment, under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act* 1999, effective from 13 May 2010 until 2039 (Approval 2008/4646; Appendix B).

A consolidated approval notice with variations to conditions was approved in 2017:
<http://epbcnotices.environment.gov.au/entity/annotation/974c80d5-d08f-e811-95dc-005056ba00a8/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1566525595379>

Excerpt of Conditions:

10. If greater than 90% of the Botanic Gardens GHFF colony has not returned to the Botanic Gardens for more than 5 consecutive days, the approval holder must implement passive measures to prevent the re-establishment of the colony at the Botanic Gardens. These measures must be approved by the Panel.

10A. The approval holder has prepared and committed funding for the implementation of a vegetation rehabilitation plan for the necessary sites (as determined by the Panel) of the new colony or colonies from the Botanic Gardens within the Sydney region. The vegetation management plan must detail commitments as to the provision of expert advice in seed collection, horticulture and ecology at the sites. The approval holder must provide for up to \$10,000 per year (including in kind contributions) for a period of 5 years to fund activities implemented under the vegetation rehabilitation plan.

16. By 31 August of each year, following commencement, the approval holder must publish a report on their website addressing compliance with the conditions of approval, including implementation of any plans as specified in the conditions. Attached to the report must be a written and signed confirmation by the Group and the Panel verifying the accuracy of the information provided. The approval holder must provide the Department with evidence of publication on the same day the report is published. The approval holder must continue to meet the requirements of this condition until such time as agreed to in writing by the Minister.

For a full list of conditions and compliance status, see Attachment A. EPBC approval conditions compliance table.

5.2 NSW approval conditions

The Trust received a Biodiversity Conservation Licence under Part 2 of the *Biodiversity Conservation Act 2016* on 22 March 2019 (Licence No C0004672).

Relevant Conditions:

The licence holder must ensure that:

1. The action is carried out in accordance with the application dated 13 March 2019.
2. The action shall be overseen by an appropriately qualified flying-fox expert, approved by the Department.
3. Deterrence actions shall not be undertaken during periods when there is a severe weather warning or severe thunderstorm warning issued by the Bureau of Meteorology for the Sydney local forecast area.
4. Deterrence actions shall not be undertaken on a day when the maximum temperature is predicted to exceed 38 degrees at Observatory Hill.
5. If at any time, the expert approved under Condition 2 considers that the flying-foxes are under unacceptable levels of stress, such that their welfare is jeopardized, then deterrence actions will cease. Deterrence actions will only recommence if the GHFF expert considers that it is prudent to do so.
6. Deterrence actions must cease immediately where any flying-foxes, as a result of the activity, have been or appear to have been killed or injured. Deterrence actions may not recommence without the approval of the Department.
7. Deterrence actions shall cease if creching young stay in the camp during the day.
8. Incidents that require deterrence actions to cease shall be reported to the Department within 24 hours.
9. Annual monitoring reports shall be submitted to the Department. Matters to be reported include:
 - a. Number of days on which deterrence actions are required
 - b. Numbers of flying-foxes that succeed in roosting at the RBG on each day
 - c. Numbers of days for which deterrence is unable to be undertaken for any reasons.
10. An annual monitoring report shall be submitted to the Department by 31 August each year.
11. The Department is to be notified whenever deterrence actions need to be recommenced after they have not been required for a period of four weeks or more.

References

Royal Botanic Garden (2013), GHFF dispersal from the Royal Botanic Garden Sydney – first annual report 2012-13.

Royal Botanic Garden (2014), GHFF dispersal from the Royal Botanic Garden Sydney – second annual report 2013-14.

Royal Botanic Garden (2015), GHFF dispersal from the Royal Botanic Garden Sydney – third annual report 2014-15.

Royal Botanic Garden (2016), GHFF dispersal from the Royal Botanic Garden Sydney – fourth annual report 2015-16.

Royal Botanic Garden (2017), GHFF dispersal from the Royal Botanic Garden Sydney – fifth annual report 2016-17.

Royal Botanic Garden (2018), GHFF dispersal from the Royal Botanic Garden Sydney – sixth annual report 2017-18.

Royal Botanic Garden (2019), GHFF dispersal from the Royal Botanic Garden Sydney – seventh annual report 2018-19.

Royal Botanic Garden (2020), GHFF dispersal from the Royal Botanic Garden Sydney – eighth annual report 2019-20.

Royal Botanic Garden (2021), GHFF dispersal from the Royal Botanic Garden Sydney – ninth annual report 2020-21.

Royal Botanic Garden (2022), GHFF dispersal from the Royal Botanic Garden Sydney – tenth annual report 2021-22.

van der Ree, R & North, J.M. 2009, *Public Environment Report: Proposed relocation of a camp of Grey-headed Flying-foxes (Pteropus poliocephalus) from the Royal Botanic Gardens Sydney*. A report prepared for the Royal Botanic Gardens and Domain Trust and submitted to the Commonwealth Department of the Environment.

Appendix A – Flying-fox monitoring data 2022-23

Date	Daytime count	Passive measures	Start time	No. of staff	Staff	Comments
Wednesday, 29 March 2023	220	No	8:00am	1	John Larsen	Roosting Palm Grove, Bed 60
Tuesday, 23 March 2023	590	No	8:00am	1	John Larsen	Roosting Palm Grove, Bed 60
Friday, 31 March 2023	440	No	9:00am	1	John Larsen	Roosting Palm Grove, Bed 60
Saturday, 1 April 2023	320	No	8:00am	1	Piret May	Roosting Palm Grove, Bed 60
Sunday, 2 April 2023	345	No	9:00am	1	Juan Lucas	Roosting Palm Grove, Bed 60
Monday, 3 April 2023	325	Yes	4.35am	2	John Larsen, Ian Black	Roosting Palm Grove, Bed 60
Tuesday, 4 April 2023	23	Yes	4:50am	2	John Larsen, Ian Black	Roosting Palm Grove, Bed 60
Wednesday, 5 April 2023	0	Yes	4:50am	2	Madeline Ward, Kayte Wilkie	Survey Palm Grove and surrounds
Thursday, 6 April 2023	0	Yes	4:50am	3	Madeline Ward, Robert Navarro, Piret May	Survey Palm Grove and surrounds
Friday, 7 April 2023	0	No	9:00 am	1	Eliza Tyson	Survey Palm Grove and surrounds
Saturday, 8 April 2023	0	No	8:00 am	1	Val Pintile	Survey Palm Grove and surrounds
Sunday, 9 April 2023	0	No	10:00 am	1	Peter May	Survey Palm Grove and surrounds
Monday, 10 April 2023	0	No	8:00 am	1	Val Pintile	Survey Palm Grove and surrounds

Appendix B – EPBC approval conditions compliance table

The RBG has moved from initial dispersal and re-dispersal actions to passive measures. Passive measures of disturbance allow for ongoing maintenance of a successful dispersal program and should act as a deterrent against the animals re-establishing. These measures may be implemented year-round and do not involve active physical harassment of GHFF. The passive measure selected by the RBG Sydney is pre-dawn noise disturbance and light.

The Trust received conditional approval from the Commonwealth Department of the Environment, under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*, effective from 13 May 2010 until 2039 (Approval 2008/4646). The below table details the full conditions attached to the licence.

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
1.	The approval holder must undertake the action as described in the final Public Environment Report and in accordance with the conditions of this approval. Where the final Public Environment Report and these conditions are not consistent, these conditions shall prevail.	Compliant	This report and all prior reports
2.	To ensure the protection of the Grey-headed Flying-fox (GHFF) colony present in the Royal Botanic Gardens Sydney (the Botanic Gardens), prior to any dispersal activity commencing, the approval holder must:	Compliant	See below
2 a)	Establish an Independent Observer Group (the Group) which must consist of at least 3 people who are suitably qualified. The Group members and any subsequent appointments of members must be approved by the Minister. The Group must be available to oversee and provide advice on components of the action as required in these conditions of approval. The Group and all associated administration must be fully funded and resourced by the approval holder, for the life of the approval.	Compliant	<p>Aaron Purcell apurcell@rspca.nsw.org.au 0405 185881</p> <p>Lynda Newnam laperouse@bigpond.com 0409 698 321</p> <p>Joy Tripovich joytripovich@hotmail.com 0404 044 300</p>
2 b)	Establish an Independent Expert Panel (the Panel) which must consist of at least 3 people who are suitably qualified. The Panel members and any subsequent appointments must be approved by the Minister. The Panel and all associated administration must be fully funded and resourced by the approval holder, for the life of the approval. No Panel member can also be appointed as a member of the Group as described in condition 2 a). The Panel must be available to oversee and provide advice on components of the action as required in these conditions of approval. Any advice provided by the Panel to the approval holder must also be provided in writing to the Minister.	Compliant	<p>Brad Law brad.law@dpi.nsw.gov.au 02 98428601</p> <p>Beth Noel beth.n@nghconsulting.com.au</p> <p>Ian Temby iantemby@hotmail.com</p>
2 c)	2 weeks prior to a dispersal or re-dispersal activity commencing, provide in writing to the Panel, the estimated number of GHFF located in the Botanic Gardens. The approval holder must also inform the Panel if the estimated numbers change by more than 10% in the 2 weeks prior to the proposed commencement of the dispersal or re-dispersal activity. A member of the Group or an appropriately experienced RSPCA Inspector must oversee the counting process and verify the accuracy of these estimated values.	Compliant	

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
2 d)	Obtain all appropriate and necessary animal ethics approvals specific to the proposed dispersal or re-dispersal activity and provide complete copies of these to the Panel. The animal ethics approvals must specify the maximum number of GHFF deaths and/or injuries that may occur per week during a dispersal or re-dispersal activity without the approval holder immediately suspending the dispersal or re-dispersal activity. The approval holder must report the death and/or injury data to the Department annually in accordance with condition 16.	Not applicable	The use of passive measures is covered by Commonwealth approval 2008/4646 and New South Wales approval C0004672. The requirement for animal ethics relates to conditions 2e and 2f which do not apply to the use of passive measures.
2 e)	Ensure that a minimum of 100 GHFF located at the Botanic Gardens, of which at least 50% are female, are fitted with tags. In the event that the total colony estimate changes by more than 10% in the 2 weeks prior to commencement of the dispersal or re-dispersal activity, the Panel must determine if any changes to the number of GHFF to be tagged should be made to ensure sufficient GHFF are tagged.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
2 f)	Ensure that at least 10%, up to a maximum of 400 GHFF located at the Botanic Gardens, of which at least 50% are female, are banded. Dominant males must also be included amongst those banded. In the event that the total colony estimate changes by more than 10% percent in the 2 weeks prior to the dispersal or re-dispersal activity, the Panel must determine if any changes to the number of GHFF to be banded should be made to ensure sufficient GHFF are banded.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
2 g)	Ensure all banding and tagging activities, as required by these conditions of approval, is overseen and verified by a member of the Group or appropriately experienced RSPCA Inspector.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
2 h)	Ensure all GHFF that are banded for the purposes of conditions 2 f) are registered with the Australian Bird and Bat Banding Scheme.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
2 i)	Conduct a public health risk analysis and prepare a management plan (the Plan) detailing all proposed components of the action. The Plan must include the identification of public health risks, such as Hendra Virus and Lyssavirus, associated with dispersal of the GHFF from the Botanic Gardens and any subsequent re-dispersal; management actions to reduce any risk; a monitoring program; and thresholds for corrective actions. The Plan must be endorsed by the Panel and a copy of the endorsed Plan must be provided to the Department.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
2 j)	The approval holder must ensure that all appropriate and necessary approvals under relevant health legislation are obtained and complied with prior to the commencement of dispersal or re-dispersal activities.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
3.	The approval holder must only undertake dispersal or re-dispersal of GHFF during the period of 1 May and 31 July in any year for the life of the action. Passive measures can be undertaken outside of the period 1 May to 31 July.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
4.	The approval holder must undertake dispersal and re-dispersal activities in accordance with the following requirements:	Not applicable	This condition applies to dispersal or redispersal, not passive measures

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
4 a)	On the first day of any dispersal or re-dispersal, activities can be undertaken for up to 30 minutes around sunset.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
4 b)	On the second day of any dispersal or re-dispersal, dispersal or re-dispersal activities can be undertaken for up to 45 minutes, but must cease 30 minutes before sunrise.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
4 c)	If GHFF are present at the site 31 days after the commencement of dispersal or re-dispersal activities, the approval holder must immediately suspend dispersal or re-dispersal activities. They must inform the Panel within 2 days of the suspension and submit a detailed report to the Panel within 10 days outlining proposed alternative measures that could be implemented. The alternative dispersal or re-dispersal must be approved by the Panel prior to commencement.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
4 d)	GHFF must not be subject to more than 3 discrete periods of dispersal or re-dispersal activity during the period of 1 May and 31 July in any year.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
4 e)	The approval holder must not recommence a suspended dispersal or re-dispersal activity until the report required under condition 4 c) has been approved by the Panel and at least 5 days have elapsed since the suspension commenced.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
5.	The approval holder must ensure daily counts of the GHFF colony to be dispersed or re-dispersed are undertaken between the period of 1 May and 31 July each year for the life of the action. During this period, the count must be overseen and verified for accuracy by a member of the Group or an appropriately experienced RSPCA Inspector at a frequency of 1 day per calendar week.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
6.	The approval holder must ensure that on all days of dispersal and re-dispersal activities during the period of 1 May and 31 July, behavioural monitoring of the GHFF colony is undertaken as described in the Public Environment Report. The behavioural monitoring must be overseen and verified by a member of the Group or an appropriately experienced RSPCA Inspector.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
7.	Dispersal and re-dispersal activities must cease immediately if, within any calendar week, there are GHFF deaths and/or multiple injuries found within 1 kilometre of the dispersal or re-dispersal sites. Death and injury thresholds are to be determined in consultation with NSW Animal Ethics Committee and agreed to by the Panel. The cause of the deaths and or injuries must be determined by a qualified vet and reported to the Panel. The approval holder must inform the Panel within 7 days of the observation being made and provide a detailed report to the Panel outlining proposed contingency plans or possible alternative measures that could be implemented to avoid further injuries or deaths of GHFF. The approval holder must not recommence a suspended dispersal or re-dispersal activity until the report has been approved by the Panel.	Not applicable	This condition applies to dispersal or redispersal, not passive measures

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
8.	The approval holder must ensure at least 1 qualified spotter is present during any dispersal or re-dispersal activity, to observe and record the direction(s) in which GHFF leave the site.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
9.	The approval holder must ensure that:	Not applicable	This condition applies to dispersal or redispersal, not passive measures
9 a)	Between 1 May and 31 July in any year when dispersal or re-dispersal activity is occurring, the tracking of a proportion of the tagged GHFF (required by condition 2) is undertaken daily by qualified operators. The location of 80% of tagged GHFF within the Sydney region as shown at Annexure 1, must be recorded at least once every 14 calendar days. The appropriate proportion of tagged GHFF located, and recorded once every 14 calendar days, outside of the Sydney Region, is to be determined by the Panel. The proportion must ensure the measure of success as defined by condition 14. This must be overseen, and results verified by a member of the Group. From 1 May, results must be provided to the Panel once every 14 calendar days until 31 July.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
9 b)	Between 1 August and 30 April, in any year when dispersal and re-dispersal activities have been implemented, tracking of the tagged GHFF must be undertaken at least once every 14 calendar days. The appropriate proportion for the success rate will be determined by the Panel but must ensure the measure of success as defined by condition 14. This must be overseen, and results verified by a member of the Group. From 1 August, results must be provided to the Panel once every 30 calendar days unless required more frequently to meet other conditions. The monitoring of each tagged GHFF is to take place for whichever is the sooner: when its tag ceases emitting detectable signals, or, when the colony has been successfully relocated in accordance with condition 14.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
10.	If greater than 90% of the Botanic Gardens GHFF colony has not returned to the Botanic Gardens for more than 5 consecutive days, the approval holder must implement passive measures to prevent the re-establishment of the colony at the Botanic Gardens. These measures must be approved by the Panel.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
10A.	The approval holder has prepared and committed funding for the implementation of a vegetation rehabilitation plan for the necessary sites (as determined by the Panel) of the new colony or colonies from the Botanic Gardens within the Sydney region. The vegetation management plan must detail commitments as to the provision of expert advice in seed collection, horticulture and ecology at the sites. The approval holder must provide for up to \$10,000 per year (including in kind contributions) for a period of 5 years to fund activities implemented under the vegetation rehabilitation plan.	Compliant	There has been one site identified as requiring a vegetation management (as determined by the Panel). This was the Centennial Park flying-fox camp at Lachlan Swamp. The RBG Sydney provided funding for a consultant, Ecological Australia, to prepare the Draft Vegetation Management plan (\$9,050 ex GST). The Centennial Park Camp Management Plan including vegetation plan has recently been

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
			finalised by the Centennial Park & Moore Park Trust.
11.	On the first day of each month for the period 1 May 2010 (or after commencement of dispersal or re-dispersal) to 1 April 2011, a progress report detailing activities undertaken during the previous month and the associated outcomes must be submitted to the Department. Each report must include the status of the colony in the Botanic Gardens at that time, the status of the re-located colony or colonies, data collected (in accordance with these conditions of approval) and details of any activities that will occur in the following month.	Not applicable	This condition applies to dispersal or redispersal, not passive measures
Secondary-dispersal 12.	If the approval holder proposes to undertake a secondary-dispersal, a management plan must be submitted for the Minister's approval. The approval holder must not commence a secondary dispersal activity unless the Minister has approved the relevant management plan. The plan must include, but not be limited to:	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 a)	The reasons for the proposed secondary-dispersal activity;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 b)	A description of the GHFF population at the secondary-dispersal site including the site location; vegetation type and condition; number of GHFF; and presence of dependant GHFF young;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 c)	Potential direct, indirect, cumulative and facilitative impacts to GHFF from the proposed secondary-dispersal activity;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 d)	Proposed methodology and timeframes for implementing the proposed secondary-dispersal activity;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 e)	Monitoring and reporting protocols;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 f)	Avoidance and mitigation measures addressing potential impacts to GHFF, which must include triggers, to suspend secondary-dispersal activities;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 g)	Evidence that all relevant State approvals; conservation advices, recovery plans and/or threat abatement plans have been considered in formulating the plan; and	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
12 h)	The roles and responsibilities for implementing the secondary-dispersal activity.	Not applicable	See RBGDT GHFF Relocation Tenth Annual Compliance Report 2022. No GHFF were observed at the RBG during this reporting period.

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	If the Minister approves the management plan it must be published on the approval holder's website within 1 month of being approved by the Minister or being submitted under condition 18.		
13.	If the Minister approves a management plan submitted in accordance with condition 12, the approval holder must ensure:	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
13 a)	That on days when temperatures are predicted to reach 40°C or more at sites where adequate vegetation cover is not present and/or GHFF may consequently be exposed to heat-stress and/or death, as determined by the Panel, water tankers and operators are present to mist spray the GHFF; and	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
13 b)	That in the local council area where GHFF have established, a public awareness campaign is undertaken and includes information on:	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
13 b) i	The proposed dispersal activities and where the GHFF originated;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
13 b) ii	The GHFF as a nationally threatened species and the protection afforded under the Environment Protection and Biodiversity Conservation Act 1999;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
13 b) iii	What members of the public should do if they come across GHFF, including injured and dead GHFF; and	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
13 b) iv	The associated potential human health issues and risks to people, including Hendra Virus and Lyssavirus and appropriate preventative measures.	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
Successful re-location of the Botanic Gardens GHFF colony 14.	Successful re-location of the Botanic Gardens GHFF can be demonstrated if, for each year that dispersal activity is undertaken in the Botanic Gardens; 80% of the colony present at the commencement of dispersal or re-dispersal activity in that year, as determined by the monitoring of GHFF in accordance with this approval, are residing in habitat:	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
14 a)	Of a sufficient area, nature and quality to support the permanent occupation by the GHFF colony present;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
14 b)	That is located within 50 km of foraging habitat of a sufficient area, nature and quality to support the foraging requirements of the GHFF colony present;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
14 c)	With canopy, mid- and under-storey vegetation sufficient to ensure that minimal GHFF will die from heat stress during days of air temperatures above 40°C;	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
14 d)	That is located in an area where the (human) community will not require the new colony or colonies to be re-dispersed, as determined by the Panel; and	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
14 e)	Where more than 70% of adult GHFF females in colonies established as a result of the relocation are breeding each year for a minimum of 3 consecutive years – a member of the Group must oversee and verify the collection of this data.	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
Administrative Conditions 15.	Within 10 days of the commencement, the approval holder must advise the Department in writing of the actual date of commencement.	Not applicable	This condition applies to dispersal or redispersal, not passive measures at RBG
16.	By 31 August of each year, following commencement, the approval holder must publish a report on their website addressing compliance with the conditions of approval, including implementation of any plans as specified in the conditions. Attached to the report must be a written and signed confirmation by the Group and the Panel verifying the accuracy of the information provided. The approval holder must provide the Department with evidence of publication on the same day the report is published. The approval holder must continue to meet the requirements of this condition until such time as agreed to in writing by the Minister.		<p>The condition to publish the reports on our website was added in 2017. As this was a new requirement, it was agreed that we will not fall into non-compliance for not publishing previous years reports (Email from Heather Cross, Post Approvals Project Officer Environmental Standards Division Sent: Thursday, 1 June 2017)</p> <p>Annual report for 2018 was not uploaded because the website was being rebuilt and action was postponed (J. Martin, pers comm.).</p> <p>Annual reports for 2019, 2020, 2021 and 2022 have been uploaded each year and are available: https://www.RBGyd.nsw.gov.au/About-us/Our-organisation/Policy-documents</p> <p>First draft of Eleventh GHFF Relocation Annual Compliance report</p>


Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
			Issued to Independent Expert Panel and Independent Observer Group on 28/08/2023. Signed off 30/08/2023 and 30/08/2023 respectively. Published on the RGBDT website 31/08/2023. Issued to DCCEEW 31/08/2023.
17.	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted, and a report submitted to the Minister. The independent auditor and audit criteria must be approved by the Minister prior to the commencement of the audit. The audit report must address the criteria to the satisfaction of the Minister.	Not applicable	This will be completed upon the direction of the Minister
18.	The approval holder may choose to revise the plan approved by the Minister under condition 12 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact. If the approval holder makes this choice, they must notify the Department in writing that the approved plan has been revised and provide the Department, at least four weeks before implementing the revised plan, with:	Not applicable	Not applicable
18 i.	With an electronic copy of the revised plan	Not applicable	Not applicable
18 ii.	An explanation of the differences between the revised plan and the approved plan	Not applicable	Not applicable
18 iii.	The reasons the approval holder considers that the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact.	Not applicable	Not applicable
18A.	The approval holder may revoke its choice under condition 18 at any time by notice to the Department. If the approval holder revokes the choice to implement the revised plan, without approval under section 143A of the EPBC Act, the plan approved by the Minister must be implemented.	Not applicable	Not applicable
18B.	If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the revised plan would be likely to have a new or increased impact, then:	Not applicable	Not applicable
18b. i.	Condition 18 does not apply, or ceases to apply, in relation to the revised plan; and	Not applicable	Not applicable

Condition Number/ reference	Condition	Is the project compliant with this condition?	Evidence/Comments
18b. ii.	<p>The approval holder must implement the plan approved by the Minister.</p> <p>To avoid any doubt, this condition does not affect any operation of conditions 18 and 18A in the period before the day the notice is given.</p> <p>At the time of giving the notice, the Minister may also notify that for a specified period of time condition 18 does not apply for the plan required under the approval.</p>	Not applicable	<p>All works are conducted as per the Operational Plan for on-going flying-fox disturbance at the Royal Botanic Garden, Sydney (June 2019). The passive measure selected by the RBG include pre-dawn noise and light disturbance. No other passive measures have been used by RBG.</p> <p>Passive measures were used to deter GHFF from roosting at RBG between the 3 and 6 April 2023. Roosting was observed between 29 March and 4 April 2023.</p> <p>Note that this Operational Plan was approved by the compliance team within the NSW Threatened Species Licence team.</p>
19.	Conditions 18, 18A and 18B are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised plan to the Minister for approval.	Not applicable	Understood
20.	If at any time after 12 months from the date of this approval, the Department notifies the approval holder in writing that the Minister is not satisfied that there has been substantial commencement of the action, the action must not commence without the written agreement of the Minister.	Compliant	Understood
21.	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the above conditions of approval, including measures taken to implement the management plans required by this approval and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Compliant	Understood. All relevant monitoring data, correspondence and reporting associated with GHFF licencing is kept in a project specific folder on the RBGDT internal computing system.

Appendix C – DECLARATION OF ACCURACY

Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed  _____
Full name (please print) Jarryd Kelly
Position (please print) Curator Manager Royal Botanic Garden Sydney
Organisation (please print including ABN/ACN if applicable) Royal Botanic Garden and Domain Trust
Date 31 / 08 / 2023

Endorsement by the Independent Expert Panel

Independent Expert Panel Report Confirmation Sheet to meet the requirements under Condition 11d of the Department of Sustainability, Environment, Water, Population and Communities Approval 2008/4646 to the Royal Botanic Gardens and Domain Trust (RBG&DT) for the relocation of Grey-headed Flying-foxes from the Royal Botanic Gardens, NSW.

DOCUMENT TRACKING – RBGDT COMPLIANCE REPORTS	
Report	11th Annual Report (2022-23)
Reporting period	1 July 2022 – 30 June 2023
Date of provision of initial report to Independent Expert Panel	28 August 2023
Date of provision of full raw data associated with the report	N/A
Date of provision of Independent Observer Group written and signed confirmation on report	N/A
Date of provision of Panel feedback on report	30 August 2023
Date of final report sign-off	30 August 2023




Independent Expert Panel Report Confirmation Sheet to meet the requirements under Condition 11d of the Department of Sustainability, Environment, Water, Population and Communities Approval 2008/4646 to the Royal Botanic Gardens and Domain Trust (RBG&DT) for the relocation of Grey-headed Flying-foxes from the Royal Botanic Gardens, NSW.

Overview and Recommendations

- The Panel (now with a membership of three) considers that the GHFF relocation component of the Action has been successful.
- Just a single noise disturbance event was required between 3 and 6 of April 2023 when ~600 flying foxes began roosting in the Gardens. No incidents were reported and no GHFF were recorded after two consecutive days of passive measures pre-dawn.
- The Panel continues to recommend that an extension of the vegetation footprint of Lachlan Swamp via additional planting of canopy trees and other site-based vegetation management would be beneficial to maintain the long-term viability of both the GHFF colony and the vegetation itself. No update has been provided on progress of this plan.

11th Annual Report Sign-off

Signatories below confirm that they are satisfied that the data and information contained within this report is for the most part an accurate summary of the data and information supplied to the Panel by the Royal Botanic Gardens and Domain Trust (RBGDT).

INDEPENDENT EXPERT PANEL MEMBER	SIGNATURE	DATE
Brad law (Chair)		29/08/23
Beth Noel		29/08/23
Ian Temby		29/08/23

Endorsement by the Independent Observer Group

ATTACHMENT C – DECLARATION OF ACCURACY

Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed



Full name (please print)

LYNDA MARIWYN NEWNAM

Position (please print)

Member RRG GHEF INDEPENDENT OBSERVER GROUP

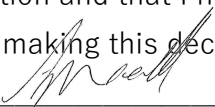
Organisation (please print including ABN/ACN if applicable)

Date

28/8/2023

Attachment C – Declaration of Accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed  _____

Full name (please print) Aaron Purcell


Position (please print) Deputy Chief Inspector

Organisation (please print including ABN/CAN if applicable) RSPCA NSW

Date 30/08/2023

Attachment C – Declaration of Accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration. It is my understanding the contents in the Grey-headed Flying-fox dispersal from the Royal Botanic Garden, Sydney Eleventh Annual Compliance Report 2023 are true to my knowledge.

Signed  _____
Full name (please print) Joy Tripovich
Position (please print) Independent Observer
Organisation (please print including ABN/CAN if applicable) _____
Date 03/09/2023