

The National Flying-fox Monitoring Program

Report on the November 2017 survey

Background

The National Flying-Fox Monitoring Program (NFFMP) is a collaborative program that brings the community and local, state and the Commonwealth governments together to provide quarterly snapshots of the size and distribution of flying-fox populations in Australia. The data collected provides unique insights into the ecology and dynamics of flying-fox populations and represents an essential underpinning for their conservation and management.

Monitoring of flying-foxes is useful for a variety of reasons but is especially important because flying-foxes are so often in conflict with humans while at the same time being of conservation concern. Two species, the grey-headed flying-fox (GHFF) and the spectacled flying-fox (SFF), are listed as threatened under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and legislation in some states. The NFFMP provides key data for decision making not just for flying-fox conservation but also to inform responses to public concerns about the impact of flying-foxes on industry, amenity and public health.



Spectacled Flying-foxes with pup (Adam McKeown)

The November 2017 Survey Results - a Summary.

The November 2017 survey was the 21st count of the project. Three hundred and one camps were surveyed; 142 in Qld, 138 in NSW, 18 in Vic, and one each in the ACT & SA.

The total number of GHFF counted in these camps was 510,000 animals and these were recorded from 112 active camps across the species' range. The vast majority of the animals were in NSW (78%), with 13% in Qld, 6% in Vic, and the rest in SA and ACT. The largest camp was at MacLean, with large numbers also recorded at Lismore, Bellingen and Port Macquarie.

In the Wet Tropics there were 86,000 SFF recorded from 10 active camps. This included large camps at Port Douglas, Cairns City and Daintree. We are seeing individual animals foraging in the southern part of the range but there are still no reports of camps south of Innisfail.

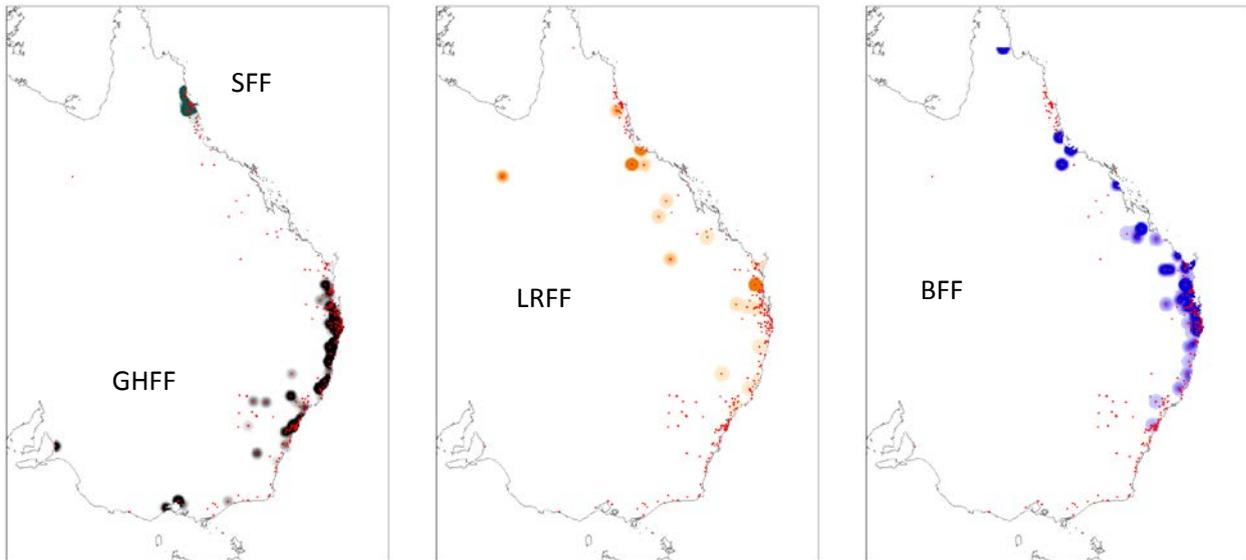
The NFFMP covers only a part of the ranges of the black flying-fox (BFF) and the little-red flying-fox (LRFF). This means that our estimates for BFF and LRFF are indicative only of the survey region and not of the size of the entire population of these two species. In this survey 127,000 BFF were recorded, with 79% of those being recorded in Qld. LRFF were recorded from 21 camps, with a total of 850,000 recorded. Small numbers were recorded in NSW, with large numbers in Queensland camps at Kandanga, Charters Towers and Townsville.



**LRFF at Charters Towers
(Adam McKeown)**

Where were the flying-foxes in November?

The heat maps below show the distribution of the different flying-fox species across the region of the NFFMP. The darker the colour the greater the abundance of flying-foxes in an area. Black shading refers to GHFFs, blue to BFFs, green to SFFs and orange to LRFFs. Red dots indicate visited camps.



The NFFMP

A map of the camps covered in the NFFMP surveys can be viewed at <http://www.environment.gov.au/node/16393>. Clicking on a camp icon will show a plot of species composition and numbers recorded at that camp during NFFMP surveys.

The aim of the program is to establish a reliable baseline estimate of the flying fox populations and over time to estimate trends. This will take a number of years since each quarterly count will be subject to various factors which will influence the results, making assessment of population size more difficult. A report reviewing the data from the first phase of the program can be viewed at the Australian Government Department of the Environment's website at <https://www.environment.gov.au/biodiversity/threatened/publications/status-and-trends-australias-epbc-listed-flying-foxes>. This analysis suggests that while the GHFF population appears to be at approximately 700,000 individuals, the population of the SFF has declined by as much as 50% over the last decade to approximately 100,000 individuals.

In order to achieve the best possible estimate it is important that surveys are performed using the methods correctly. We are continuing to conduct training sessions and the CSIRO urges any counters who have any questions or concerns about count methodology to contact David Westcott at david.westcott@csiro.au or Adam McKeown at adam.mckeown@csiro.au.

Thank you to all the counters who put in the hours to assist the program. Your effort is greatly appreciated.

If you would like to participate please contact:

New South Wales – Mike.Roache@environment.nsw.gov.au

Queensland – Pauline.Fitzgibbon@des.qld.gov.au

If you know of additional camps or have questions about the counts please contact:
david.westcott@csiro.au or adam.mckeown@csiro.au

Additional information about the program can be found at:
www.environment.gov.au/biodiversity/threatened/species/flying-foxes-monitoring-program.html

The National Flying-fox Monitoring Program is a collaboration between the Australian Government, the South Australian, Victorian, New South Wales, Australian Capital Territory and Queensland governments, CSIRO, local governments and volunteers in New South Wales and Queensland. This project is funded by the Commonwealth of Australia, the State of New South Wales, the State of Queensland and CSIRO.