Australian Platypus Conservancy

Lake Wendouree Rakali Monitoring Program

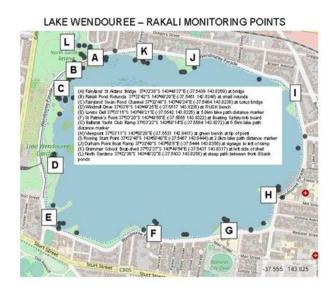
Summary of Results 2023 (1 December 2022-30 November 2023)

Monitoring of the Lake Wendouree rakali population using visual-survey techniques formally commenced on 15 October 2022. This meant that the spring 2022 quarter (i.e. September-November) was only partially covered and the initial results obtained were possibly somewhat tentative as volunteers developed their observational and recording skills. Accordingly, the period 1 December 2022 to 30 November 2023 represents the first full year (2023) of comprehensive results for this program.

Results per site

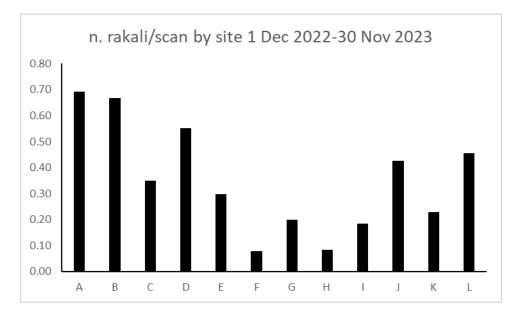
2023 ((Dec-Nov)
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		·		% Scan
	Scans	Rakali	Rakali/scan	total
А	389	269	0.69	18.33%
В	339	226	0.67	15.98%
С	298	104	0.35	14.04%
D	239	132	0.55	11.26%
Е	144	43	0.30	6.79%
F	90	7	0.08	4.24%
G	100	20	0.20	4.71%
Н	60	5	0.08	2.83%
I	87	16	0.18	4.10%
J	148	63	0.43	6.97%
К	105	24	0.23	4.95%
L	123	56	0.46	5.80%
	2122	965	0.45	100.00%

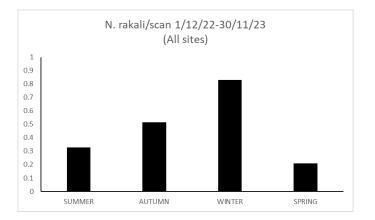


Twelve points are routinely monitored around Lake Wendouree by individual volunteers. During 2023 more than 2000 standardised scans were completed. The majority of scans (nearly 60%) were undertaken at four sites (A-D) in the north-west sector of the lake reflecting the fact that this area is probably the easiest to access for most volunteers.

These sites were also found to have relatively high numbers of rakali/scan – probably related to the fact that the Fairyland wetlands in this sector appear to provide good habitat for rakali while the nearby restaurant and picnic areas provide good scavenging opportunities. However, rakali were recorded at all sites indicating the most of the lake area provides suitable conditions for the species.



Analysis of results by seasons



N. rakali/scan 1/12/22 to 30/11/23 (sites A-D only) 1 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 SUMMER AUTUMN WINTER SPRING

The highest rate of rakali/scan was recorded in the Winter quarter (Jun-Aug) while the lowest was in Spring (Sep-Nov). This seasonal variation is consistent with the little that is known about the annual life-cycle and behavioural pattern of this little-studied native species – e.g. compare with the seasonal variation in the number of Victorian sightings reports received for 2023 by the Australian Platypus Conservancy (and submitted to Atlas of Living Australia).

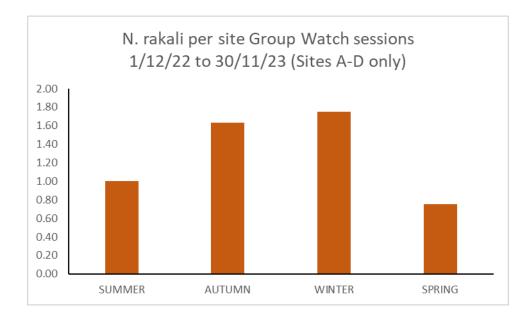
Of some concern is that the rakali/scan rate for the Spring quarter appears to be somewhat lower than perhaps might

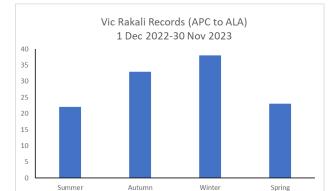
be expected. However, when the results are restricted to only those from sites A-D (see above) this figure appears closer to normal expectations. Nevertheless, this situation requires to be kept under scrutiny.

Group Watch outcomes

During the year Group Watch sessions were conducted during each quarter. This entails posting volunteer observers for a one-hour period at the monitoring points around the lake in order to gain a consolidated 'snapshot' of rakali activity and occurrence.

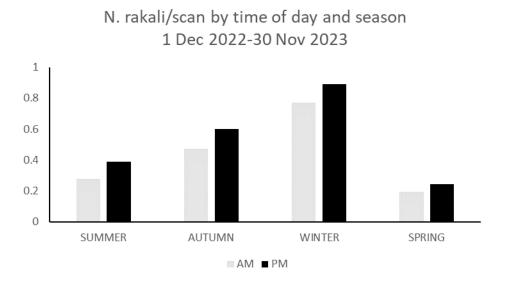
Again, the pattern of seasonal results from Group Watch was very similar to expectations (see above), confirming that the visual survey techniques appear to be producing consistent outcomes.





Results by time of observation

Very little difference was noticeable in the results of morning and afternoon/evening monitoring, with the latter consistently yielding a very slightly higher rate in the number of rakali/scan throughout the year.



This result was also repeated during Group Watch with an annual rate of 0.81 rakali per site recorded in morning sessions and a rate of 0.88 in the afternoon sessions.

Conclusion

The volunteer-based visual-survey monitoring program has established conclusively that Lake Wendouree is an excellent location – possibly the best in Victoria – to observe the fascinating and attractive water-rat/rakali (*Hydromys chrysogaster*).

The 2023 overall scan rate (0.45 sightings per scan) indicates that the chances of spotting this species are generally close to 50% - a relatively high figure for any native mammal – and underscores that there are important opportunities to develop community awareness and tourist interest.

In addition, the need to take the conservation of rakali into consideration in all matters relating to the management of Lake Wendouree and its surrounds should be obvious.

The first full year of the monitoring program has now established a base-line to help keep track of any fluctuations in the Lake's rakali population. A possible dip in numbers in the Spring 2023 quarter has been flagged (see above) and therefore it is imperative that the situation is kept under review so that appropriate and timely remedial action can be considered if necessary.

Acknowledgements

The tireless and enthusiastic work of Lissa Ryan, the volunteer co-ordinator of the monitoring program, is gratefully acknowledged.

The large number of volunteers who have participated in Group Watch sessions and/or have contributed data to the ongoing monitoring program are also thanked for their invaluable contribution.

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