

Organ Pipes bat box check 7 April

Despite the 7:30 a.m. start, we had a good work team to get going: Ruth Glass, Christine Prewer, Kate Senior, Michael Bajer, Mark Scida (a member of the Friends group in the 1990s) Stephen, Tanja and me



Ruth, studying kangaroos as her research project



Kate



Returning the ladder, end of morning

We split into two teams, Stephen and Tanja starting early to get the Freetails in the hope they had not defecated out last night's meals. Michael and Mark joined them. They emptied the large boxes and all the ones from 13 to 17 that often have

Freetails and Tanja popped them all into foam cups for the morning. There were only 8 Freetails, well down on the 30 or so of recent years. Kate did much of the ladder climbing in my group. In box 15 we found three bats of 3 different species: our only Chocolate Wattled bat for the day and



a Gould's and a Freetail.



Five boxes had groups of over 20 bats. This is B7



After all the bat boxes were emptied, we had a peek into a glider box and found a family curled up together.

Eva Reda joined us at the Visitor Centre, while Christine generously went off to Watergardens for food and milk.



We had 221 bats to examine with many bags hanging up awaiting their turn. Mark has had some experience working with Tanja and helped with some of the bat assessing.



Eva and Ruth got lots of practice and rapidly became confident at making judgments about reproductive condition.



We finished up the last bag about 2:30 p.m., when Debbie arrived to return bags and hangers from the previous week's harp trapping evening release and Ruth and Christine had to go off to another engagement.



The last few bags contained several of the oldest banded bats from the early 2000s, probably now about a decade old, like this one



Once the 200+ Gould's had been done, it was time to peep into the cups to see if the Freetails had co-operated and left little presents for Tanja. Some had, and their gifts went into little vials with ethyl alcohol to be subjected to DNA analysis to find out what Freetails eat.



Stephen PIT-tagged the Freetails not already tagged in previous months.



Stephen and Tanja took the bats over to Debbie's to be released during the evening by her and Eva and Ben.

Box	Bats	Species	Adult	
			M	F
C30	30	Gould's	4	26
C25	23	Gould's	2	21
C07	22	Gould's	11	11
C28	22	Gould's	7	15
C27	19	Gould's	9	10
C16	18	Gould's	9	9
C29	16	Gould's	1	15
C05	14	Gould's	1	13
C22	13	Gould's		13
C23	11	Gould's	8	3
C20	9	Gould's	4	5
C40	6	Gould's		6
C35	5	Gould's		5
C22	3	Gould's	2	1
C15	1	Gould's	1	
	1	Chocolate	1	
	1	Freetail		1
C42	3	Freetail	1	2
C14	2	Freetail		2
C43	2	Freetail		2
C01	1	Gould's	1	
C17	1	Gould's	1	
C39	1	Gould's	1	
221		Totals	62	159

Female to male ratio was 2.6 to 1

There were a few problems with bag labeling but I think I have sorted out where they came from.

Year	2009	2010	2011	2012	2013
Gould's	207	151	269	235	212
Chocolate			2	1	1
Lge Forest	3	14	4	6	
Freetail	27	21	28	33	8
Total	237	186	303	275	221

Total catch was a bit down this year, partly fewer Freetails, partly fewer Gould's.

Stephen and Tanja between them banded 15 new bats, one Chocolate and 14 Gould's. We now have 381 banded bats recorded, 10 Gould's and 3 Forest bats from Natasha's banding, and 368 banded since Dec '12, including four on which bands were removed due to minor banding injuries and new bands placed on the left forearm

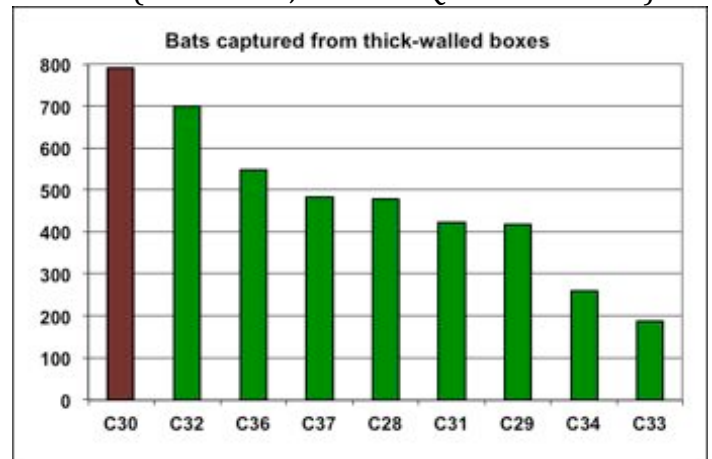
	Old	Dec	Feb	Mar	Apr	Total
Gould's	10	153	151	6	14	334
Lge Forest	3	26	2	1		32
Sml Forest				12		12
Sth Forest					1	1
Chocolate					1	1

Of the 153 Gould's banded in December, 78 have now been recaptured in both Feb and Apr. so 50% are very loyal to our boxes. A further 35 Gould's have been captured twice: in Dec., and once since.

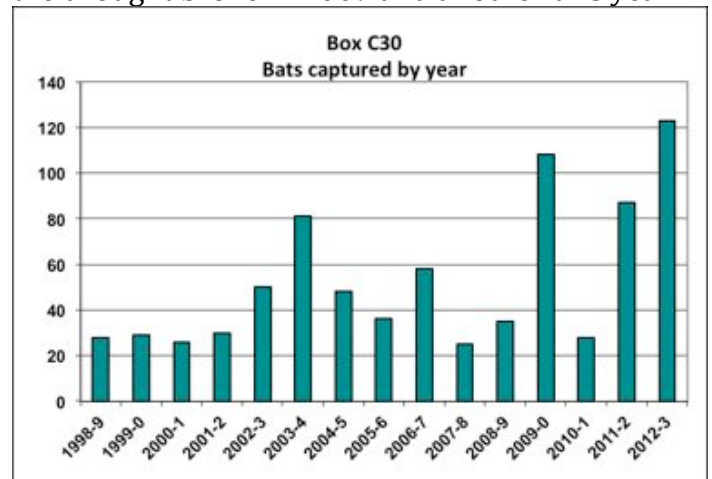
Of the 324 Gould's banded since Dec, 212 are females and 112 are male. The Gould's banded this month were 7 males and 7 females.

Box 30

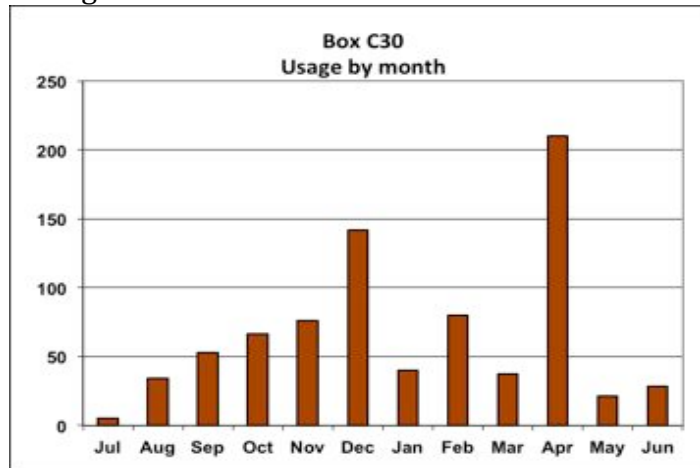
This is the most-used of the 9 thick-walled boxes installed between Oct '98 and Nov '01, numbered 28 to 37 (minus C35, the little Queensland box)



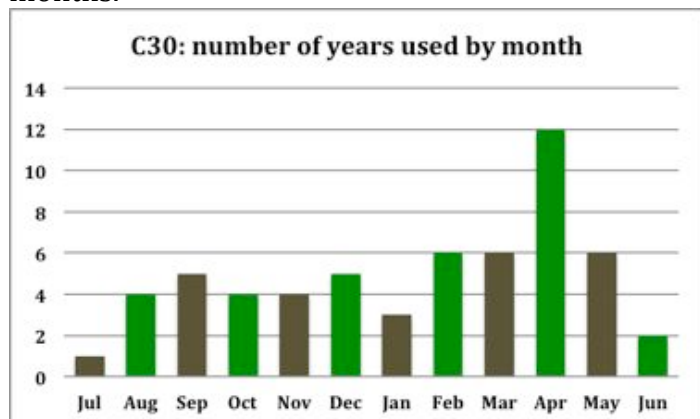
Its usage has been fairly steady in the 15 years since it was installed, with a spike in usage when the drought broke in 2009 and another this year



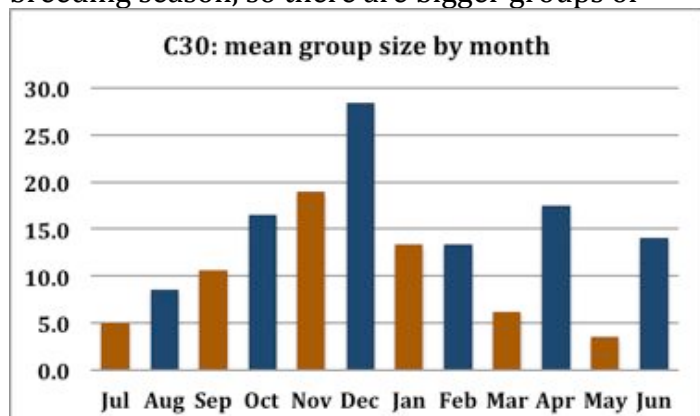
It was originally installed, along with the other 8, with hope that they would be used during the cold winter months, to make up for the thin-walled boxes being used almost exclusively during the warm months of spring to autumn. But like most of them, this is not the way it turned out, as its usage peaks in April, with a smaller peak in mid-summer, December, and it is used very little in winter, May to August.



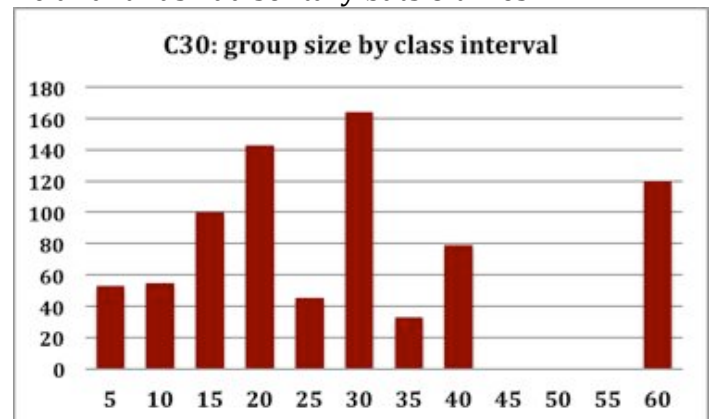
This month fits the pattern well as the 30 bats, all Gould's, found in it, made the biggest group for the month. Not only do more bats use it in April, it is used just about every April, whereas the rest of the year it is far more often unoccupied. The chart is somewhat distorted by our not having checked boxes during the odd-numbered months since early 2008, so a more valid comparison would just use the green columns for the even-numbered months.



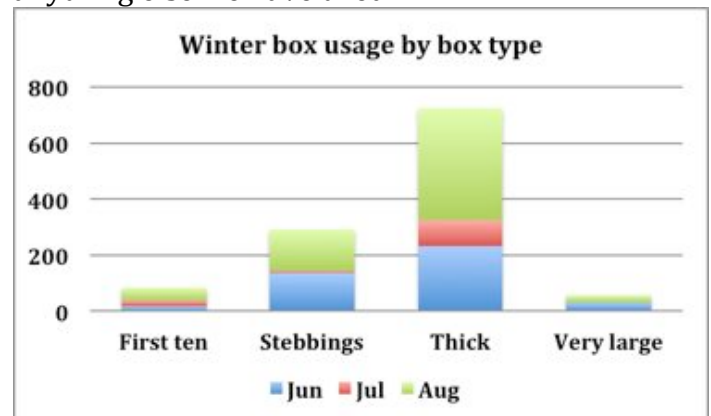
The box is used by maternity groups during the breeding season, so there are bigger groups of



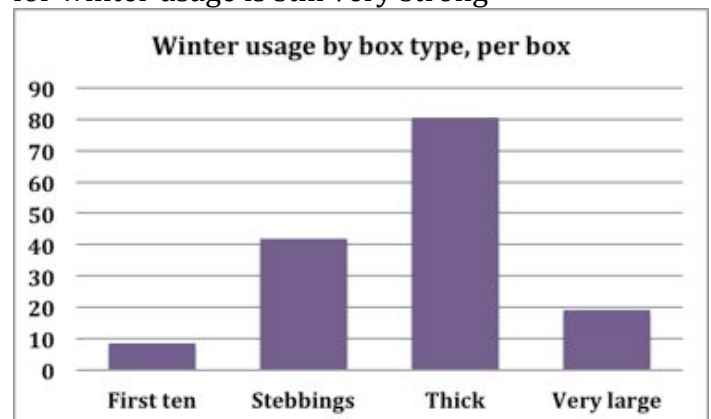
female bats occupying it in December, with a minor peak in April. In Dec '09 and again in Dec '12 there were 60 bats in this box, though this is not the norm, as usually groups are smaller than 40 and it has had solitary bats 8 times.



So as a winter box it is not a great success, and as far as the bats are concerned it is just another roost, for them to explore its microclimate and use throughout the year when it meets their needs. When compared with the other box designs, however, although winter usage is low, it is far larger than the other designs, per box, for each of the three winter months. So these boxes seem to meet the needs of the bats during winter better than anything else we have tried.



When recalculated to allow for number of boxes of each type, the suitability of the thick-walled boxes for winter usage is still very strong



Next box check Sunday 23 June 2 p.m. Back to afternoons now that checking Freetail scats is over for the year.