

## Bat box check Organ Pipes NP 7 Dec 2014

Just after the October check, the tree with C17 & C24 fell to the ground, smashing C24. So I had Hugh make a replacement.



Stephen and I went out in November to put up the two new boxes on the nearest living tree.



Hugh had spare timber and made an extra box for me, so we now have C44, just south of C15



On the monitoring day, a big team turned up again, Conor and Kristin in the foreground



There were 23 Freetails, so Stephen and Lindy mainly worked on them.



Phillipa Grylls (1<sup>st</sup> year biology) came with mother Jennifer again, and worked on bat-handling skills, with some advice from Anita Torrance



And we had a visitor from England, Colin Edwards, who has 8 years' experience working with bats in



the “home counties” just north of London, and is briefly in Australia on business.



Anita had Caroline Durre for scribe



Stephen had several new Freetails to microchip and ran out of chips just as he got to the last bat



Which turned out to be a momentous bat – we had our first Freetail in Jan. 2000, and their box use grew quite slowly, peaking in 2008-9. Visits were mainly in April, after the breeding season ended. So it was a

huge surprise this month to find two newborn Free-tails, one still with its placenta attached, crawling about independently, bare loose skin, huge feet, very undeveloped wings.



The older of the two had more developed wings.



Some of the Gould's pups were fully furred, nearly full-grown, but still eagerly suckling



Once all the Freetails had been done, Stephen and I went down into the valley to return them to their



boxes, then went back for the bags of Gould's. Mothers and pups in almost every bag.



While down there, I replaced the shredded fire-hose lid attachments on C6 and C5 with some flexible plastic sheet, which is more waterproof too.



As Stephen stood by one tree, he spotted the desiccated shell of a bat, which turned out to be one of the last bats banded by Natasha, probably in 2004: 85362 was recorded as pregnant in October but has



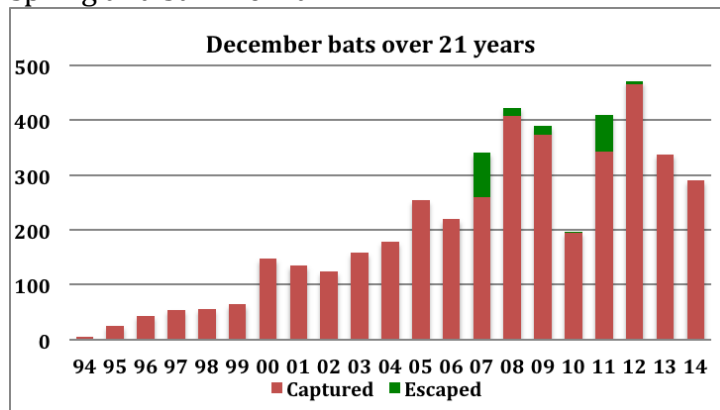
been dead a fair while, so maybe the pregnancy was terminated by her death, and she fell out of the box to get snagged on the tree's bark below.

Box	Bat	Species	Adult		Juvenile	
			M	F	M	F
C09	53	Gould's		22	15	16
C41	40	Gould's	1	14	15	10
	1	Freetail		1		
C16	43	Gould's		15	14	14
C07	38	Gould's	3	14	11	10
C13	35	Gould's	3	15	9	8
	1	Freetail	1			
C01	32	Gould's	1	13	9	9
C31	20	Gould's	2	11	1	6
C42	11	Freetail	2	7	1	1
C15	10	Freetail		10		
C20	2	Gould's	2			
C22	1	Gould's	1			
C34	1	Gould's	1			
C40	1	Gould's	1			
C44	1	Gould's	1			
	<b>290</b>	<b>Totals</b>	<b>19</b>	<b>122</b>	<b>75</b>	<b>74</b>

There were no Large Forest Bats (*Vespertilio*) this year and Gould's were down 61 on last year. December bat numbers seem to be declining, having peaked in 2012.

Year	2010	2011	2012	2013	2014
Gould's	177	321	399	328	267
Lge Forest	16	14	73		
Sthn Forest	1		1		
Freetail	2	8	3	9	23
Mormopters				1	
<b>Total</b>	<b>196</b>	<b>343</b>	<b>476</b>	<b>338</b>	<b>290</b>

Despite the long drought, the number of December bats kept rising to 2008, but has fluctuated a lot since, perhaps due in part to strong fluctuation in spring and summer rain.

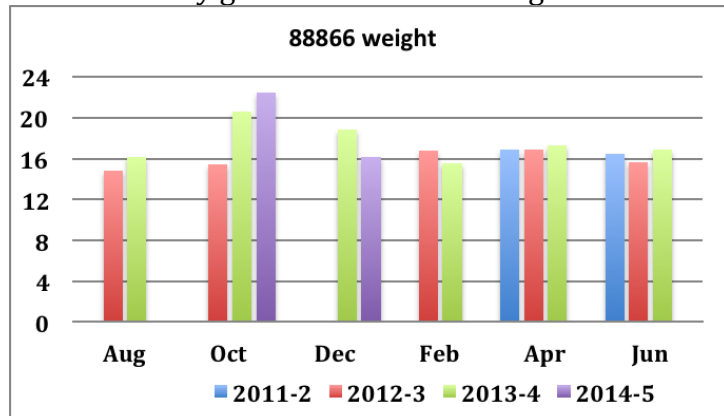


There were 104 adult female Gould's, of which 65 were judged to be still lactating, another 32 had completed lactation, and 5 were still pregnant – perhaps with a second pregnancy for this year.

There were 6.1 females per adult male, about normal for this time of year. 78 new juveniles were banded until the stock of bands was exhausted, and 8 new microchips were inserted into Freetails. We now have 780 banded smaller bats and 58 microchipped Freetails.

### Gould's female 88866

This very old female has been captured 15 out of 15 times since I took responsibility for the project so we have a very good record of her weight fluctuation



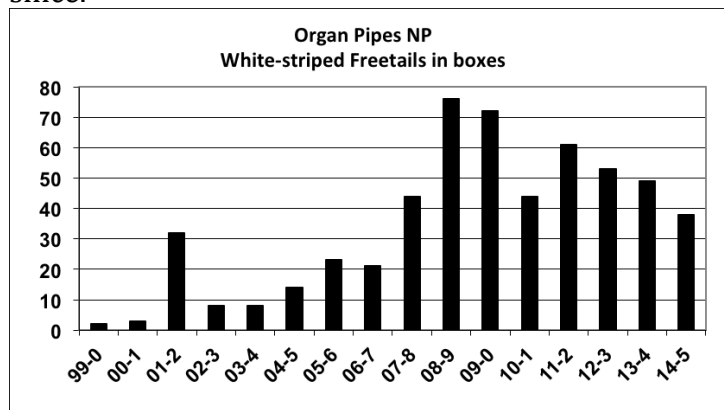
She must have been closer to full term when weighed in October than last year, and dropped further this December but is remarkably good at maintaining her weight through winter months. She shows a strong preference for box C41, where she was found this month.

### Gould's female 85362

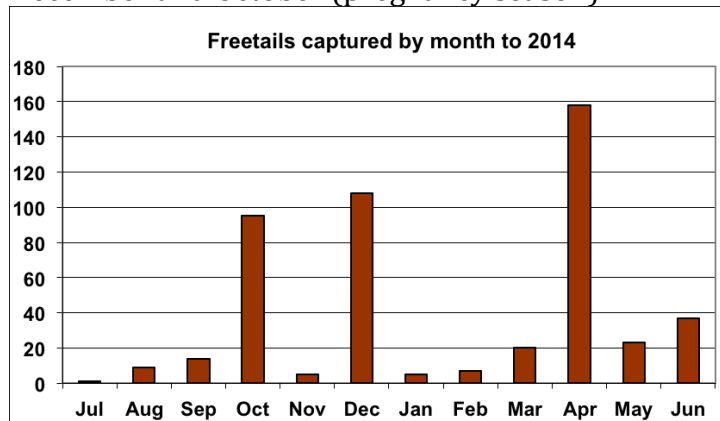
This is the one found dead snagged on bark below box 6. She's about the same age as 88866, perhaps 11 years old, and was captured in Oct '12, Feb, Aug and Dec '13 and again in Oct '14 when she was judged to be pregnant. These two very old bats have been loyal to our boxes for their entire lives. It is very rare to find the carcass of a banded bat, so we have a reasonable idea of when it died.

### Freetails

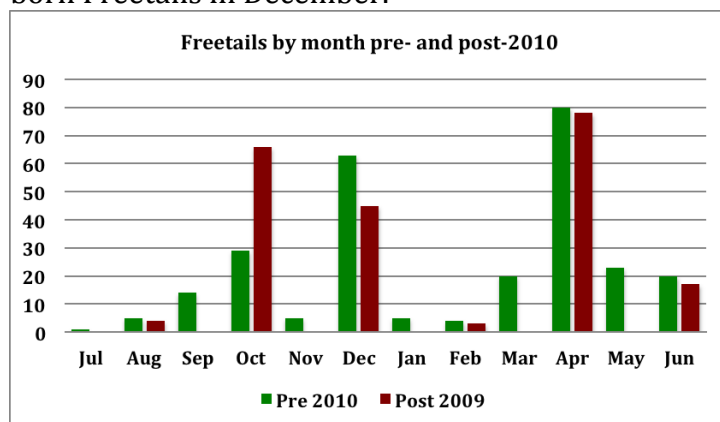
We had our first Freetail in Jan 2000 and they increased their box usage very slowly for years, suddenly took off in 2008-9 and have steadily declined since.



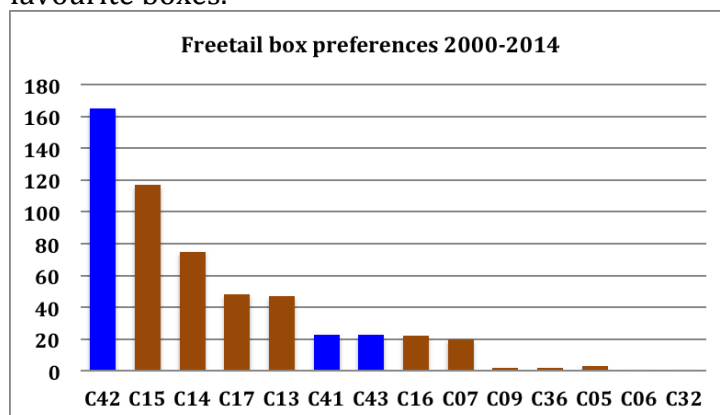
The monthly pattern shows a strong habit of visiting in April (after the breeding season), but also in December and October (pregnancy season).



Had a look at the pattern before and after Dec 2010 and found their preference for visiting our boxes has shifted away from December towards October while the April visitation rate is steady. All the more wonder that we have now experienced our first ever (Australia's first ever?) close-up observation of newborn Freetails in December.



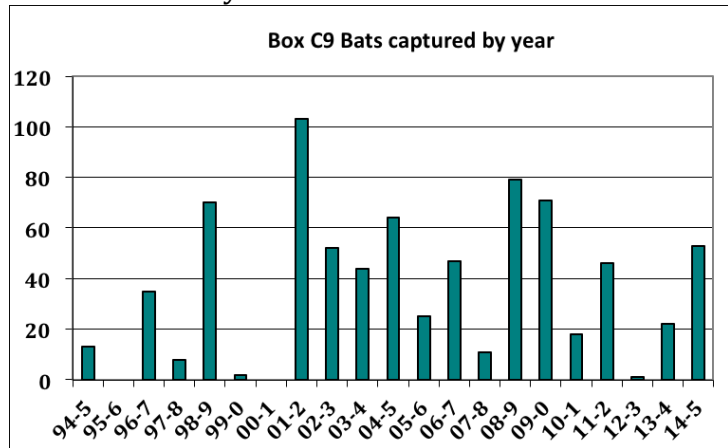
They strongly prefer box C42, the other two very large boxes both having had big problems with ants. Second most-favoured box is C15, this month's Freetails were divided between C42 and C15, their two favourite boxes.



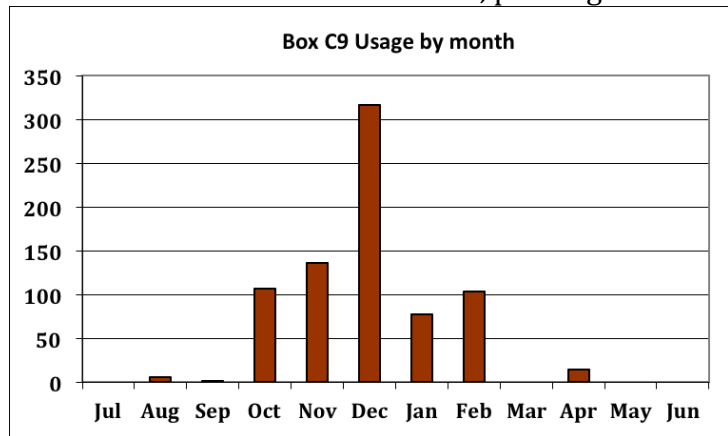
### Box 9

This box had the largest group of Gould's bats this month. It was installed in April '92 and first used in

Nov. '94. After C7 and C5 it is the most-used of the old Oregon boxes. Usage peaked in 2001-2 and has fluctuated wildly since then.



Like all of the old Oregon boxes, it is used mainly in the summer and avoided in winter, peaking in Dec.



**Next box check: Sunday 8 February 2015, 2 p.m.**