

Organ Pipes bat box check: 16 Aug.

A beautiful winter afternoon, fine, windless and quite warm, just right for outdoor work. Steve arrived early to start on the boxes and had over half of them done when I arrived at 2.15 with four recruits waiting in the car park: Rachel Lee, Jessica Taylor, Claire Hollier and Alex Hendren, to add to the big group already helping Steve. I only had 7 boxes to do and found one group of 13 Gould's.



Peeked into a few glider boxes (closing some that had been propped open) and found a Ringtail possum had sneaked into one box.



A few casual park visitors stopped for a show-and-tell from Lindy, while Emmi Scherlies and husband Armstrong waited with a bat hanger. Steve took down several boxes that were much in need of repair – lids missing, rotten back plates, warped lids, etc., and then we were off to the Visitor Centre to set up processing with a team of about 15. We had another two people eager to see bats come in following my car after the park closed – very excited to get a peek at ongoing research.



Steve set up his genetic sampling kit at one end, assisted by Michael Bajer, with bat assessing going on at the other end. Steve had a laptop with a spread-sheet of banded bats, so Rebecca checked it for verifying that bands were being read correctly.



Manisha, Rachel, Claire, Amanda and Lindy examined the bats, with the others scribing. There was one Freetail, one Chocolate Wattled Bat and the rest were Gould's.



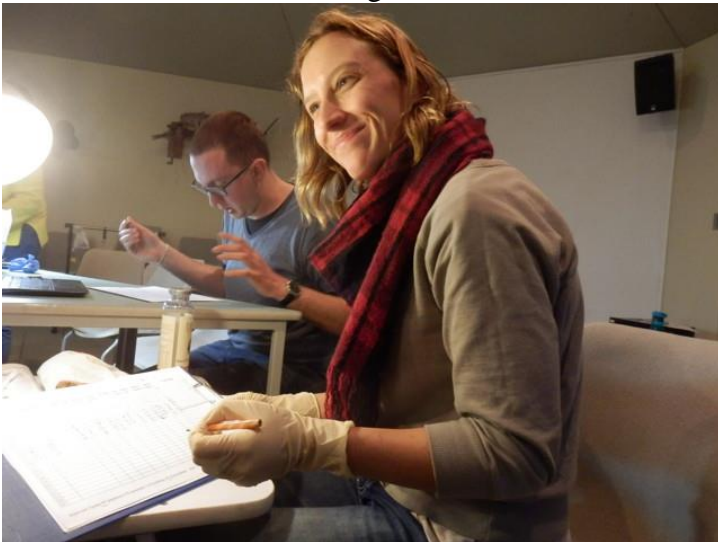
One new bat to be banded, the other 86 already banded.
Amanda Bush:



Claire Hollier:

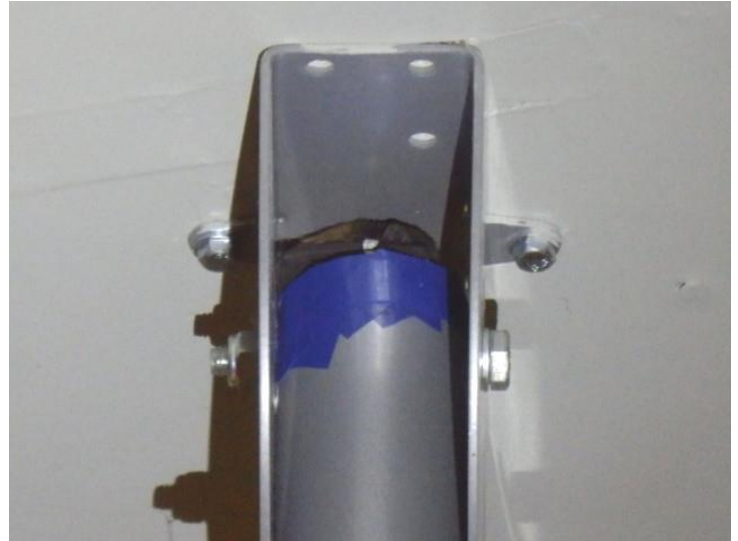


Alex Hendren and Armstrong Scherlies:



Early evening there was a bit of excitement as one male Gould's escaped, flew around and settled atop the data projector pole, which had been taped over, but leaving a small gap between it and the bracket screwed to the roof, just big enough for a little bat.

I brought in my ladder, a table was placed against it, Lindy leaned against the ladder, Steve, Michael and Armstrong held it steady while I climbed to the roof and retrieved the bat, which walked out onto my hand to escape my other hand, was weighed and measured and popped into its bag with its roost mates.



About 8 o'clock we all drove down to the Pipes to release the bats. All but one flew off quickly, the last one having gone a bit torpid. When I drove off to fetch my ladder, it eventually decided to fly off under its own steam.



Lots of gear and leftover food to pack up, and we were out of the park at 8:30 or so.

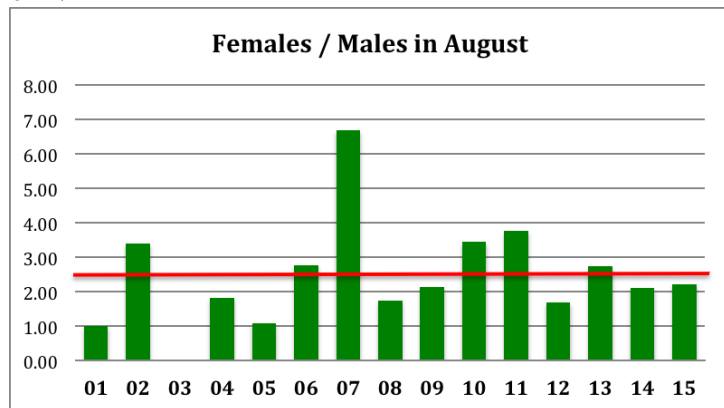
We had 89 bats altogether, 87 Gould's and 1 each of Freetail and Chocolate Wattled Bat. As has become normal in winter, 2/3 of the bats were in the thick-walled, well-insulated boxes. Boxes 32 and 36 are the most-used boxes in August. And also quite normal, the one little Chocolate bat chose a box with small entrance slit and small internal volume. There were 30 post-lactating females to 28 preparous, so the PL were a slight majority.

Box	Bat	Species	Adult	
			M	F
C32	23	Gould's	6	17
C36	23	Gould's	7	16
C14	17	Gould's	7	10
	1	Freetail		1
C29	13	Gould's	2	11
C15	8	Gould's	3	5
C22	1	Gould's	1	
C33	1	Gould's	1	
C42	1	Gould's		1
C19	1	Chocolate	1	
	89	Totals	28	61

The catch has varied very widely in August since 2011, but always very much dominated by Gould's, usually well over 90% of all bats.

Year	2011	2012	2013	2014	2015
Gould's	113	101	196	52	87
Lge Forest	3		2	2	
Freetail	3	1	3	5	1
Chocolate			1		1
Total	119	102	202	57	89
Gould's %	95%	99%	97%	88%	98%

A ratio of 2.2 females for each male, about normal for winter, and about to change as big maternity groups of females will form by October when we next check the boxes. There was a big increase in females and a decrease in males in 2007, yielding the very high ratio of F/M



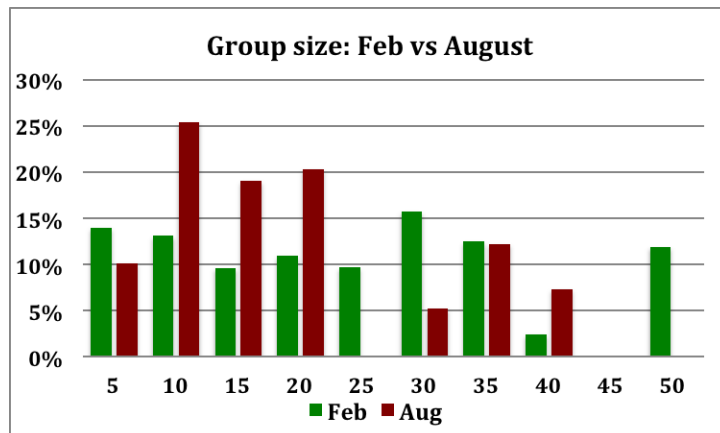
Recording errors

In April two bats were recorded as having band 98154, one male and one female. Band 98156 didn't seem to have been used, so was probably recorded incorrectly. They both reappeared this month. 98154 was the female so the male must have been 98156.

Group size

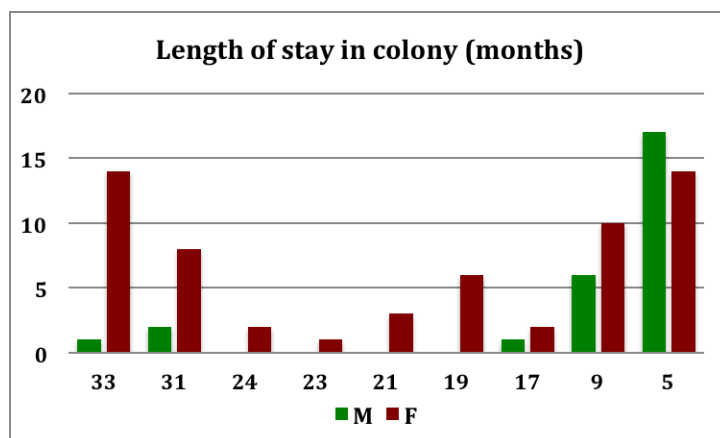
This month was a bit unusual with two quite large

groups of 23 bats in boxes 32 and 36. August is usually dominated by quite small groups, contrasted with the generally larger groups in summer.

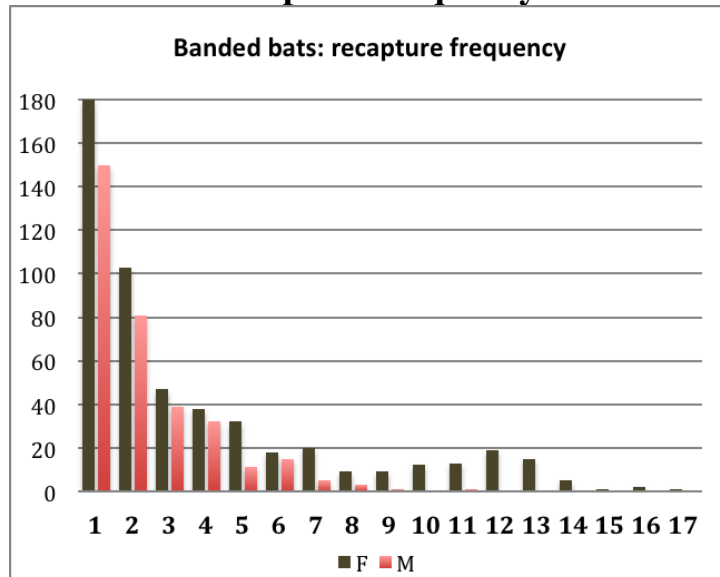


Community structure

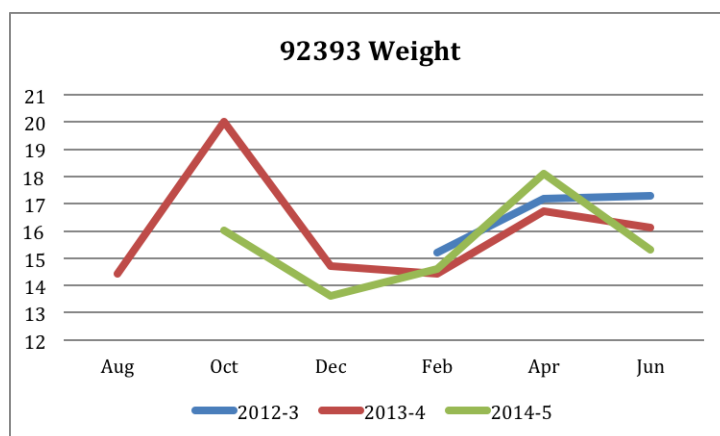
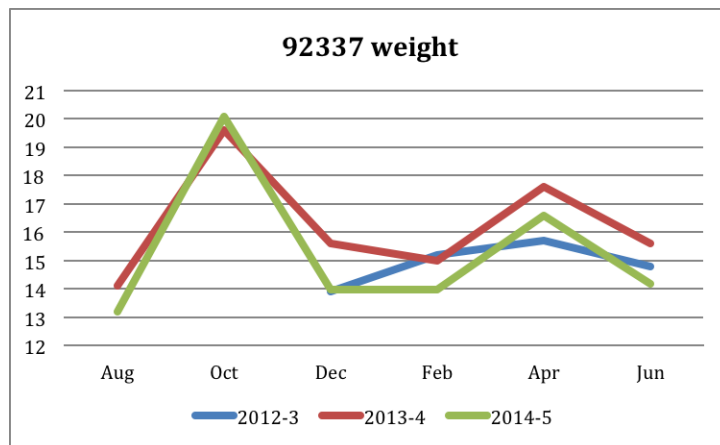
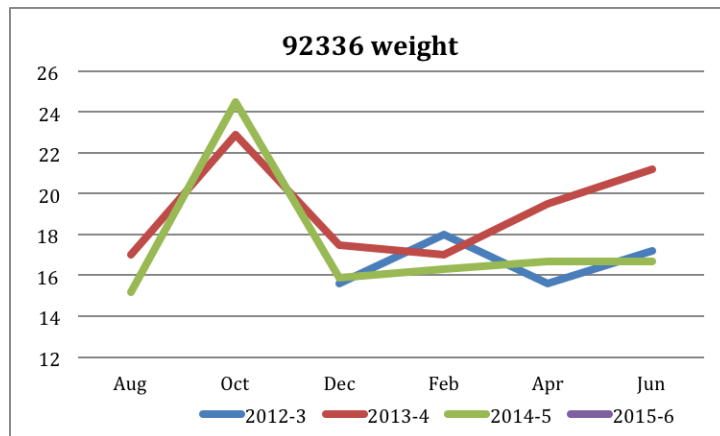
The chart below shows that almost all the long-staying members of the bat population are females. 3 males have been with us since banding recommenced in Dec. 2012, but nearly all other males have stayed less than a year.



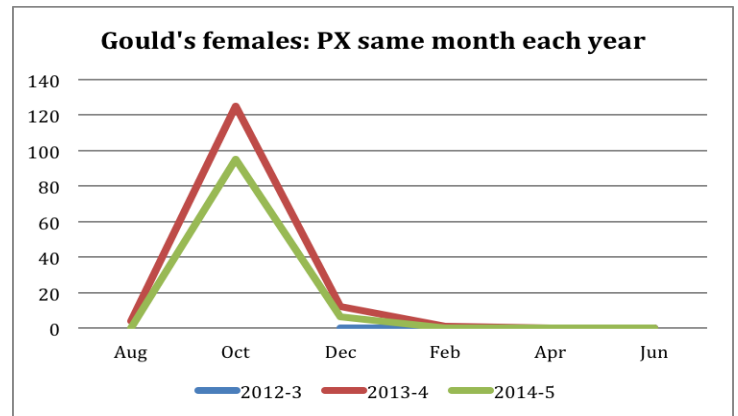
Recapture frequency



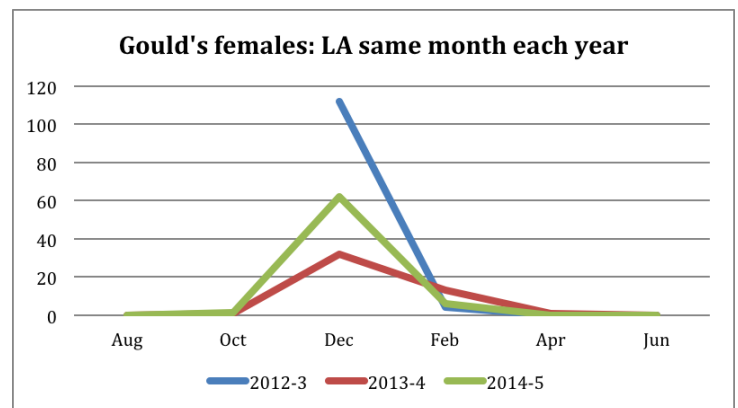
We have now checked the boxes 22 times since Dec. 2012. One bat has been captured 17 times (88666, banded probably in 2005, not seen since April this year), two female Gould's 16 times and one more 15 times. These older females probably form the core of the colony. Each of the three boxes with the biggest bat groups had one of these older females. All three become much heavier in October, near full-term pregnancy. 92336 was recorded as gaining an astonishing amount of weight in June 2014 when the other two lost weight



and extracted patterns of when bats were recorded as being pregnant or lactating. Nearly all pregnancies were found to be in October, a very few in December, when there has been a second breeding for the summer.



And nearly all lactating bats were identified in December, with a very few in February.



Next box check: Sunday 11 October 2 p.m.

Pregnancy and lactation

I've been through all the data since December 2012,