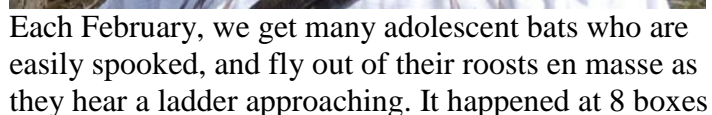
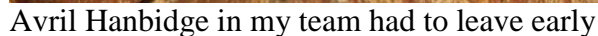
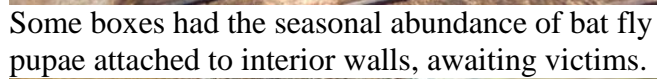


A fine windless day for batting, and there were big groups of Gould's in many boxes. This is C43. When I arrived Steve's team was at their first box.



A group of people, mostly women, are seated at a long table in a well-lit room, working on sewing machines. They are focused on their tasks, with some looking at their work and others looking towards the camera. The room has large windows in the background, and the atmosphere appears to be a collaborative workshop or class.

Lindy assessed bats, banded some, and had Andrew as a

scribe.



Steve microchipped a Freetail and several Gould's and took many genetic samples.



I scribed for Caroline Durre and Emmi Scherlies. Desk lamps for assessing adult/juvenile status were very helpful



Emmi took away most of our bat bags at evening's end, to use in her Naracoorte project on Bentwing bats.



Michelle Toomey scribed for Amanda Bush



Doug Hoather is a new member of Friends of Organ Pipes who has become very interested in our bat project, and scribed for Michael Gooch.



Several people brought contributions to the feast. The visitor centre was very busy with bat assessing, micro-chipping, labeling and storing of genetic samples and checking of bat reproductive history, until just on 9 p.m., when Emmi and Amanda went with me down into

the valley to release bats from multitudes of calico bags. Steve was still taking samples from the last few, which were released on the escarpment behind the VC.

Box	Bat	Species	Adult		Juvenile	
			M	F	M	F
C23	39	Gould's	3	24	5	7
C14	35	Gould's	5	16	7	7
C44	29	Gould's	1	14	3	11
C07	28	Gould's	4	9	6	9
C05	16	Gould's	2	7	2	5
C20	15	Gould's	2	6	1	6
C34	13	Gould's		6	5	2
C16	12	Gould's	3	7		2
C36	9	Gould's	1	5	1	2
C43	6	Gould's		2	2	2
	1	Freetail	1			
C17	4	Gould's	1	3		
C06	2	Gould's		1		1
C22	2	Gould's	1	1		
C24	2	Gould's		1		1
C39	2	Gould's	1	1		
C40	2	Gould's	1			1
C15	1	Gould's			1	
C21	1	Lge Forest	1			
C42	1	Freetail	1			
C27	1	Gould's	1			
C33	1	Gould's		1		
	222	Totals	29	104	33	56

The arrangement in boxes probably bears little resemblance to the way it was before our arrival, as just on half the bats rearranged themselves, we probably lost some and failed to recapture them from their new roosts.

Escapees

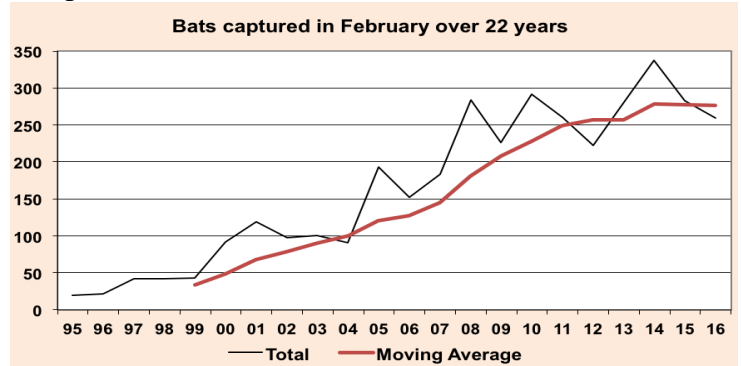
Box	33	42	05	15	35	14	06	41
Bats	~30	28	20-25	15	10	2	1	1

Because February so often has many escapees, the total number of bats is always uncertain, and the distribution around the boxes from bagged bats is quite different from how they were distributed before we arrived. We now have records of 21,213 bat captures over 21 years, of which 19,095 are Gould's

Year	2012	2013	2014	2015	2016
Gould's	178	253	203	169	219
Lge Forest	8	10	1		1
Freetail				30	2
Total	186	263	204	199	222
Gould's %	96%	96%	99%	85%	99%

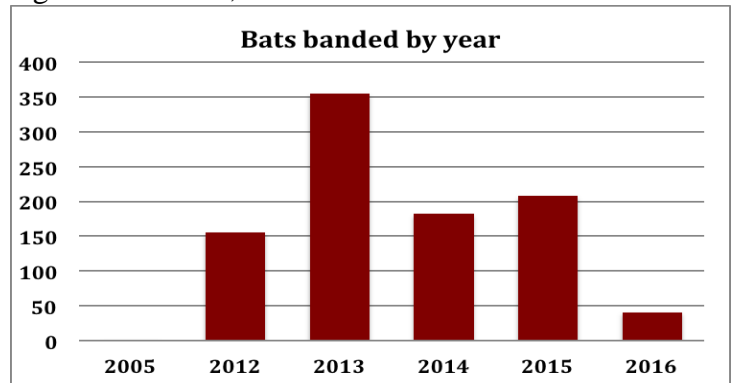
The 5-year moving average shows an ongoing rise, but the raw data shows a fair bit of fluctuation. I have

assumed for this year that we recaptured about half the escapees

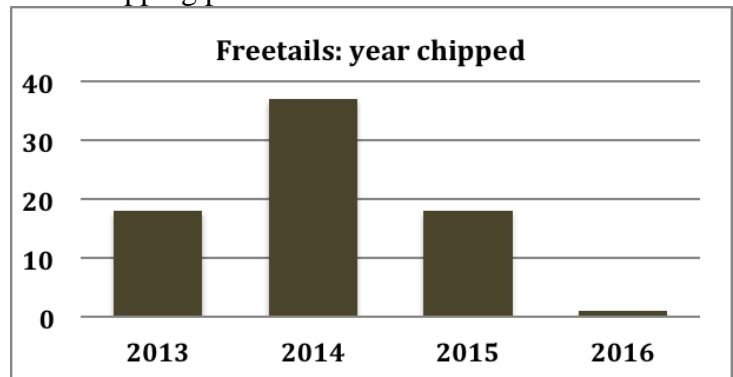


Banded & chipped bats

36 young bats were banded this month and 5 more were just microchipped, as well as one new Freetail. So 42 new bats. That takes the total to 1061 banded and/or chipped smaller bats plus 79 microchipped Freetails, for a grand total of 1,140 marked bats.

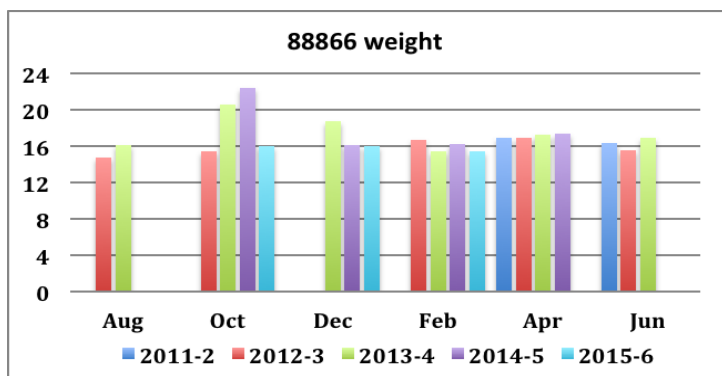


The large figure for 2013 is due to banding having been recommenced after a long interval in Dec. 2012, so there were many generations of bats being banded in a short time. The 2016 figure will grow a lot next December. The solitary 2005 bat is 88866 who is still with us, probably now past her 10th birthday. Freetail microchipping peaked in 2014.

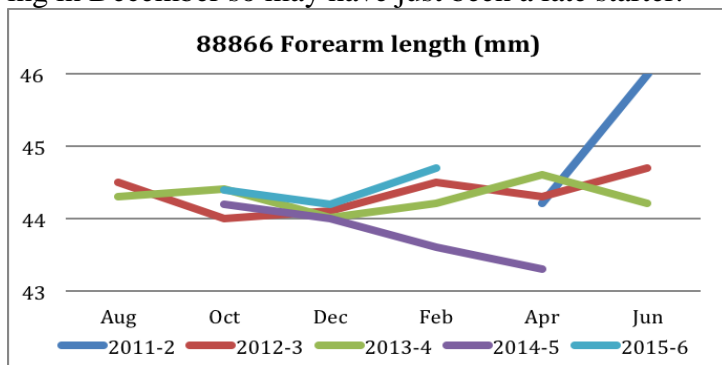


Old female 88866

She was probably banded in Feb. 2005 so would now be over 11 years old. Since April 2012 we've had 25 box checks and she's been captured 21 times, so we have a good record of her weight and forearm length and how they fluctuate.

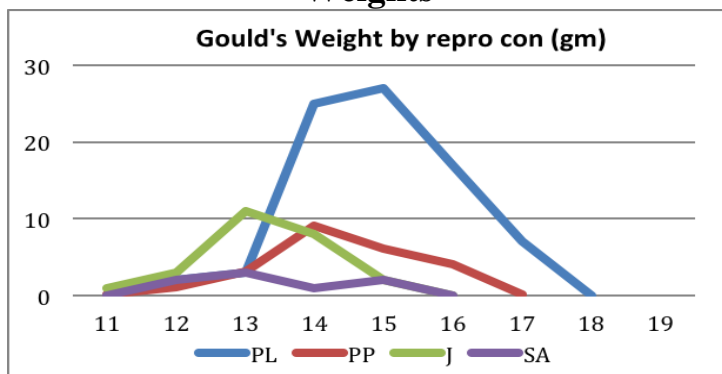


Her weight is very consistent through the year except of course when she's pregnant in October. She seemed to have missed out last spring but was assessed as lactating in December so may have just been a late starter.

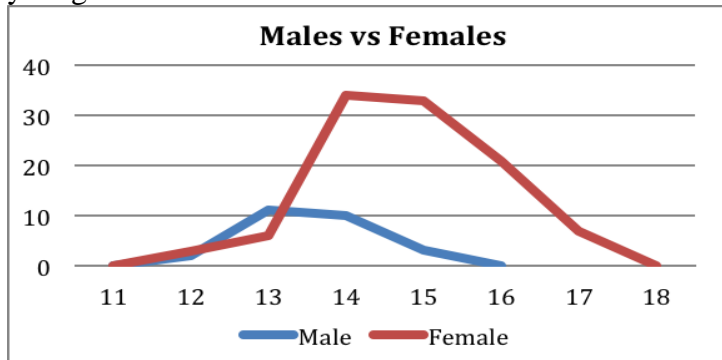


Her forearm length is also quite consistent, except for the worrying loss through late summer 2014-5, and the probably erroneous 46 mm in June 2012.

Weights



As you might expect, older more experienced PL bats were generally heavier than younger PP and even younger Juveniles and sub-adults.

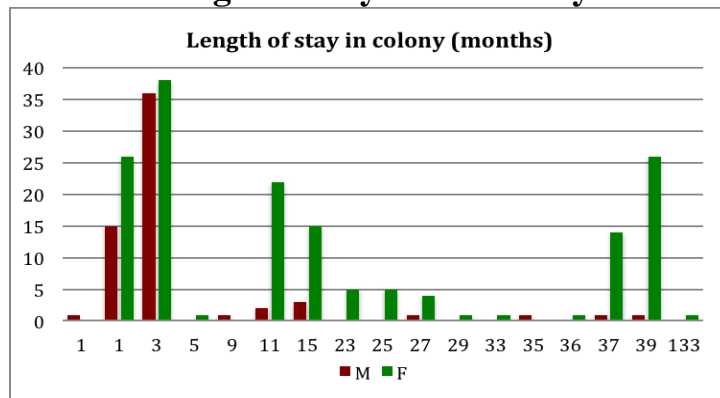


And females were heavier than males.

Female to male ratio

Again, with so many escapees and the probability we didn't recapture all of them, the ratio of females to males may not be reliable, but here it is anyway. We had 133 adults: 29 male and 104 female, so 3.6 females for each male. And there were 89 juvenile or sub-adult bats, with 33 males and 56 females, so 1.7 females per male. This may be distorted by some of the young bats having reached ossification stage in their wing knuckles and shifted into the adult categories, and lots of young bats having gone missing, hiding in boxes we didn't check for a second time.

Length of stay in the colony



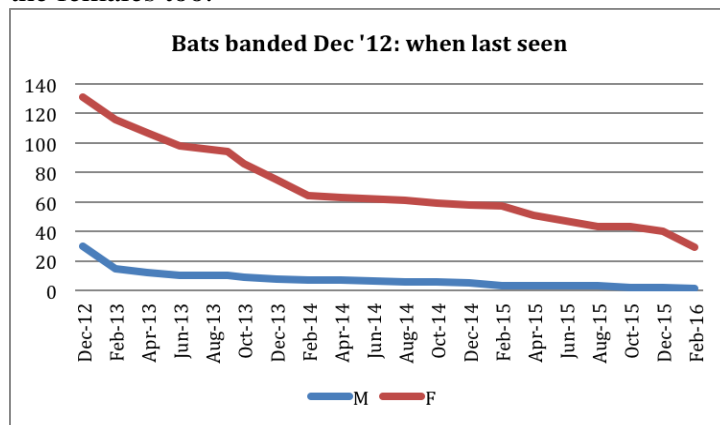
Nearly all the male bats stay in the colony a short time - only 4 of the 62 longer than one year. Nearly all the bats remaining several years in the colony are females: 40 of 42 bats with us for 3 years or longer.

What happened to the bats banded in Dec 2012?

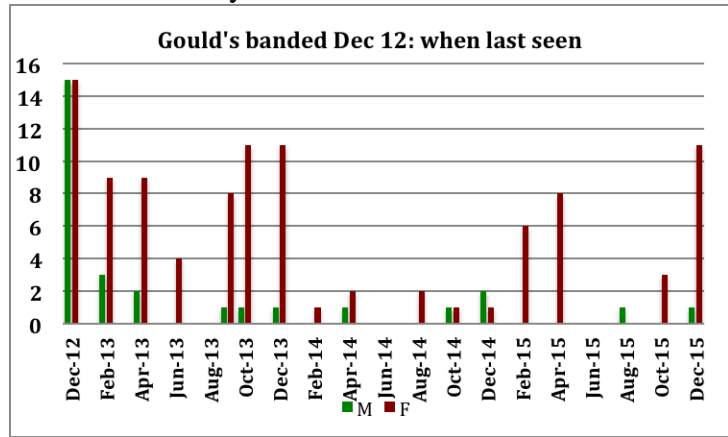
24 Large Forest bats were banded on our first banding month, all females. They seem to reappear in October each year, when they are near full-term pregnancy, then disappear for 12 months, and some never reappear. Each October more of the original 24 fail to reappear so we are now down to the last 6

Last seen	Dec 12	Oct 13	Oct 14	Oct 15
Bats	6	10	2	6

161 Gould's were banded that month, 131 females and 30 males - it was breeding season so probably most of the males were that spring's young and perhaps 30 of the females too.



These bats have gradually dropped out, many in the first year, a lot more in the second year, then it slowed down in late 2014. Peak season for disappearance of females is summer. We are now down to 29 females and 1 male, so 102 females and 29 males are no longer seen in our colony.



Some of this is just normal population turnover – adolescents leave home to seek their fortune elsewhere, old folks die off and are replaced by a younger generation, especially the females. You can see from the “length of stay in the colony” chart that quite a few of the yearling females seem to have elected to remain and become long-tem members of the colony.

Next box check: Sunday 17 April 2 p.m.