

## Bats, Organ Pipes NP, 20 June 2017

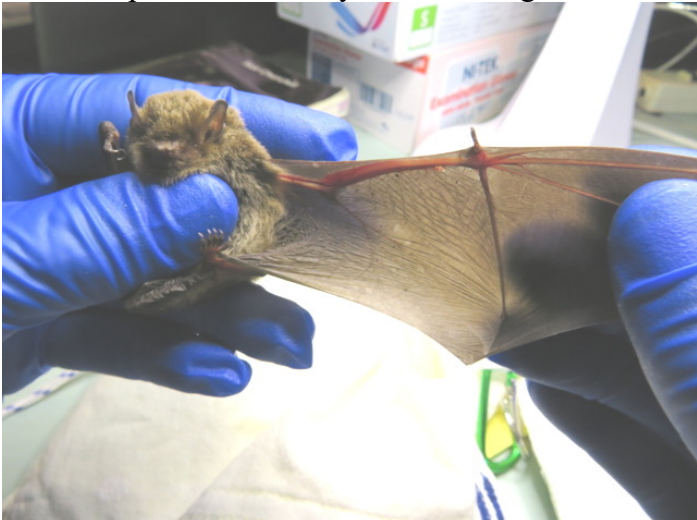
Winter brings fewer bats, and that's what happened this month with just 7 boxes occupied. I arrived late and missed most of the box-checking, but stayed to help Steve do some maintenance on a couple of boxes. Bridal Veil Creeper was rampant all over Main Flat.



Up in the Visitor Centre, work was well under way by the time we drove up.



Just two species for the day, with 11 Large Forest bats



New recruits included two young boys who were very

helpful with scribing and checking bat bands against the spreadsheet history files.



Astrid Scott joined us in Feb. and returned this month.



Amanda di Fuccio was with us for her first visit



Anna Feldman, already vaccinated, had her first session of bat-handling with our project.



Jessica Ridout scribed for Anita



And Kael Mason helped by checking the spreadsheet on one laptop



Some of the Large Forest Bats were in boxes on repeat visits, so are perhaps part of the long-term population seeing the park as home.



There were only 112 bats, so it was all over soon after 6 o'clock. Andrew came down to help release the bats.



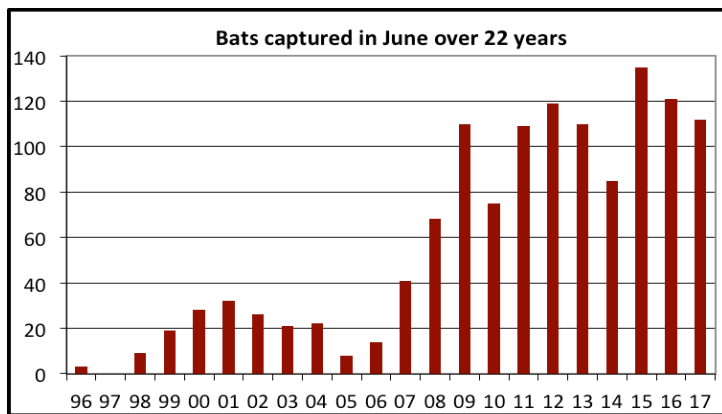
As happened in April, most of the bats were in the new-multi-chambered boxes, 45 and 46, with 51 of the bats between them.

Box	Bat	Species	Adult	
			M	F
C46	28	Gould's	12	16
	6	Lge Forest	6	
C39	20	Gould's	2	18
C45	17	Gould's	4	13
C22	12	Gould's	1	11
	5	Lge Forest	1	4
C36	15	Gould's	6	9
C30	8	Gould's	2	6
C38	1	Gould's	1*	
	<b>112</b>	<b>Totals</b>	<b>35</b>	<b>77</b>

\* dead

### June bats

The peak for number of bats captured in June was reached in 2015, with 135, and it has declined a little in each of the past two years. It is still radically different from the numbers using boxes in June up to 2006.

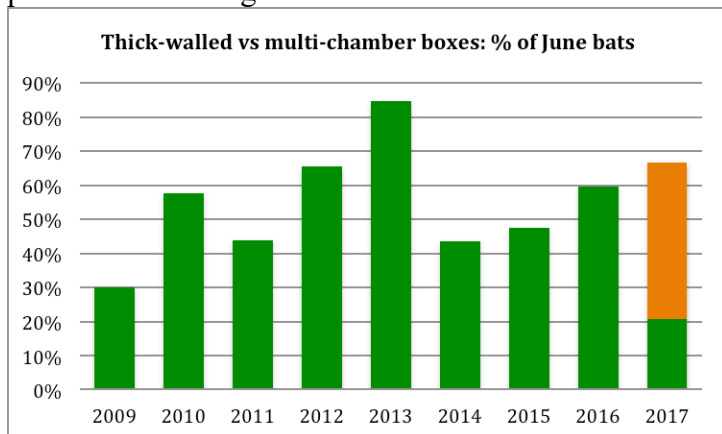


The number of Gould's has been fairly constant except for 2014. The numbers for the other two species have fluctuated much more widely.

Year	2013	2014	2015	2016	2017
Gould's	102	53	112	97	101
Lge Forest	4	5	16	6	11
Freetail	4	27	7	18	
<b>Total</b>	<b>110</b>	<b>85</b>	<b>135</b>		<b>112</b>
<b>Gould's %</b>	<b>93%</b>	<b>62%</b>	<b>83%</b>	<b>80%</b>	<b>90%</b>

### Thick-walled boxes

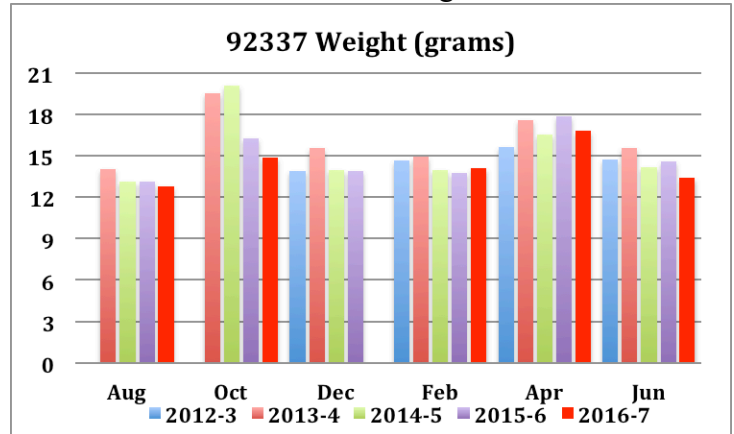
Usually in June these have most of the bats in them, but this year, the new multi-chambered boxes Steve made have displaced them. So we are learning new things about the bats' preferences when they are given more choices. We'll see over the next couple of years if this new preference persists, or they return to their former preferred box design.



### Old female Gould's 92336 and 92337

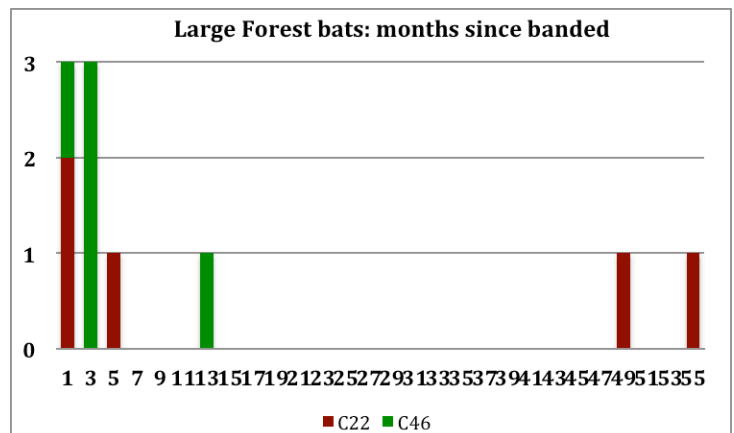
These two were banded in Dec. '12, and seem to be great friends, as they have been found in the same box together 13 times of the 32 captures to date. Both were lactating when banded in Dec. '12 so were mature breeding females. We have no idea whether this was their first breeding season or their fifth. They might be sisters, or mother-and-daughter. They have both been captured almost every monitoring

session, so we have excellent weight records for both.



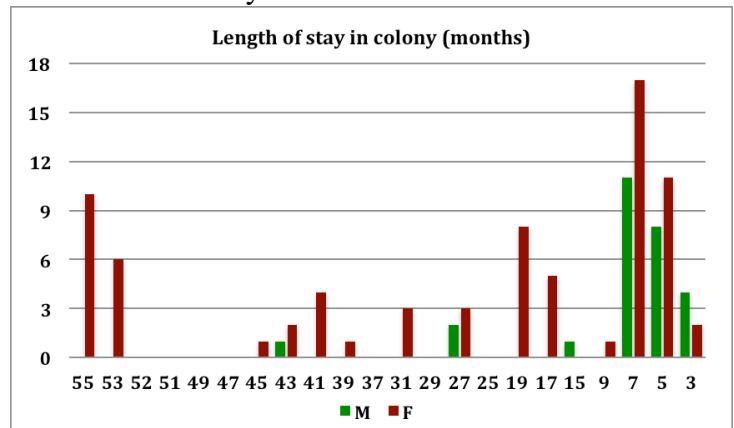
### Community structure

There were 11 Large Forest bats in two boxes, 5 in C22 and 6 in C46. C22 had two bats banded over 4 years ago and 4 adolescents. C46 had a 1-year-old and 3 adolescents. So there were two generations in both boxes.



### Gould's Wattled bats

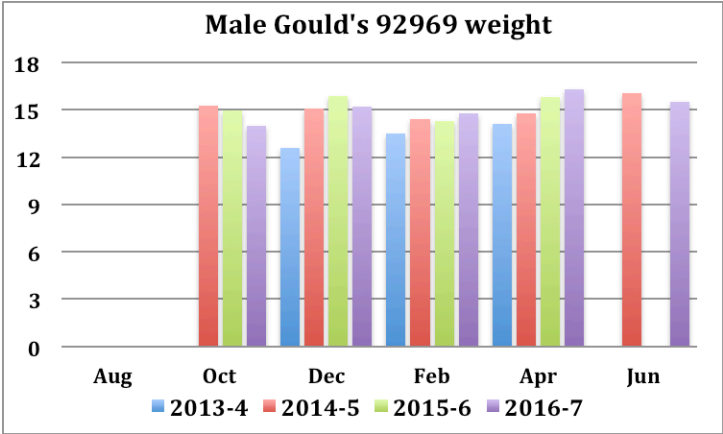
Our oldest bat, 88866, was not in a box this month, but there was still the usual mix of 4, 3, 2, 1-year olds and adolescents. Nearly all the older bats were females



### Old male Gould's 92969

This bat was banded by Lindy in Dec '13 as a juvenile, so is now almost 4 years old and has been captured 17 times. He has been in the boxes consistently except in winter, and is the only male who has remained part of the colony almost year-round for four years. Male

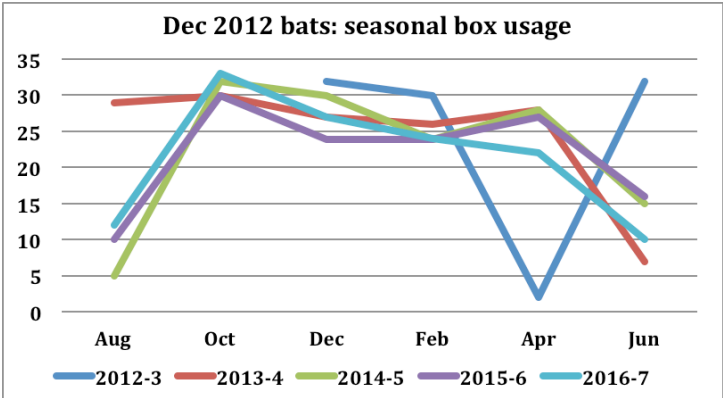
weights don't have the bimodal distribution of females, not pregnant in October, and put on much less weight than females in late autumn, though his April weight has increased each year. He has been found in C22 five times and in C20 four times, so seems to have strong territorial preferences



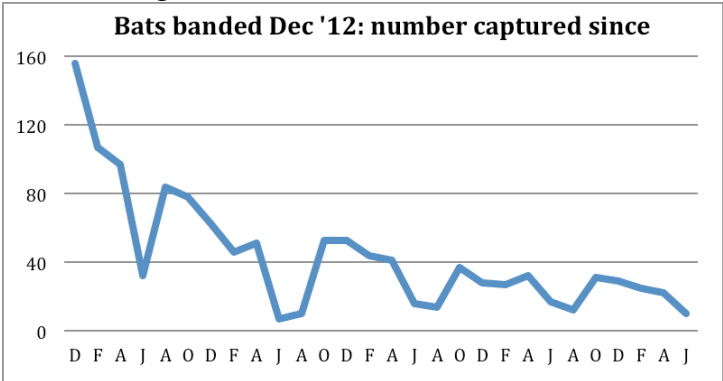
Something new I thought I'd examine is whether this age mix works within each box that had a big group in it. As was found in April, almost every box with a group of 10+ bats had one or more banded in Dec 2012 or Feb 2013, so the colony's elders, plus 3, 2 and 1 year-old bats and a bunch of adolescents. The Large Forest bats in C22 were the same, with an elder and some adolescents, while C46 had a 1-year-old chape-ronne. (see spreadsheet below)

**Bats banded in Dec 2012**

Of 32 frequently recaptured bats banded in Dec 2012, 10 were recaptured this month. They have a regular pattern of seasonal box usage, assembling their community from October to April, and many of them going elsewhere for the winter.



Many of the bats banded at that first month's marathon banding effort would have been adolescents, leaving home over the following autumn and spring, and some have died, but quite a few have stayed around, except for wintering elsewhere.



There were just ten of them this month, but probably most of the others will return in spring.

**The team**

This month we had Steve, Lindy, Pia and her mother Mary, Anita, Andrew, Nick Swinton, Astrid, Kael, Jessica, Amanda, Anna and me. Thanks to all for a great day's effort.

**Next box check: Sunday 13 August 12 noon**

		2012		2013		2014			2015		2016		2017							
Species	Box	Dec	Feb	Jun	Oct	Dec	Feb	Apr	Dec	Apr	Dec	Feb	Apr	Jun	Oct	Dec	Feb	Apr	Jun	
Gould's	C22	12	1			2	2				3				1	2	1			
Lge Forest	C22	5	1		1												1		2	
Gould's	C30	8	1	2								1				2		2		
Gould's	C36	15	3	1					2	2	1					2	4			
Gould's	C38	1															1			
Gould's	C39	20	1			1	1	1	1	2	3	1				6	2	1		
Gould's	C45	17	2	1		1						3				8	2			
Gould's	C46	28	2	2			1			1	1			1		8	9	3		
Lge Forest	C46	6												1				4	1	
		112	11	6	1	1	3	4	1	3	5	8	5	1	1	1	28	20	10	3