

Bats, Organ Pipes NP, 28 April 2019

We had another fine afternoon for checking boxes, and a good-sized team to help with two ladders. Sian and Matthew with Steve



The new Latrobe Uni box had 12 Gould's in it – a tight squeeze. Got them all out.



Across Jackson's Creek we spotted three naughty fat sheep feasting on the grasses. Rangers were informed.



Sian got to carry several kilograms of bats on her hanger. The bat assessing team soon arrived, the Visitor Centre was opened, and the afternoon's processing got under way.

Sian and Emmi worked at Lindy's table. The practice of arranging

separate tables, with one bat-handler and one scribe continued and worked well



Pia had Sara as her scribe



And Connor van Coorn returned after a long absence, with his friend Julia to scribe for him.



Steve worked with them part of the afternoon, in between PIT-tagging unmarked bats.



So there were four tables going for several hours, and the bags steadily moved from the IN trolley to the OUT



As usual, most of the bats were Gould's, but there were also 14 Freetails, spread over 5 boxes. They have always had a strong preference for boxes 13 to 17 and the three large boxes, 41 to 43, and were true to form this month.



As bat assessing finished near sunset, several of the team joined me down in the valley to make offerings to the bat god, with appropriate incantations, but no incense. All the bats had been quite torpid when captured but had warmed up with handling and flew off quickly.



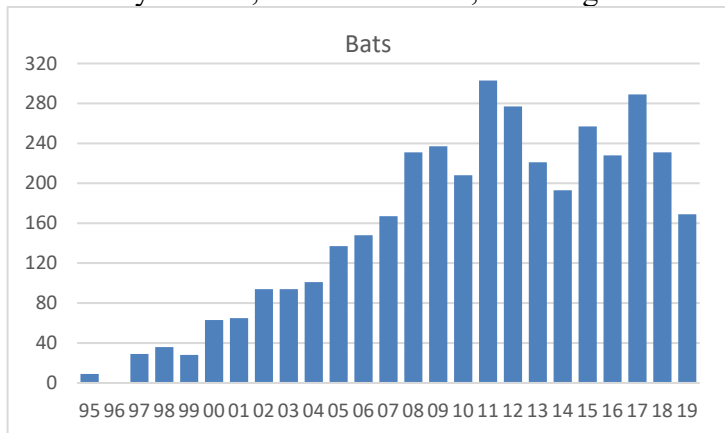
Box	Bat	Species	Adult		Juvenile	
			M	F	M	F
C32	28	Gould's	2	26		
C30	20	Gould's	2	18		
C41	17	Gould's	7	10		
	1	Freetail		1		
C09	17	Gould's	11	6		
C16	14	Gould's	1	13		
C01	13	Gould's	7	6		
Lou	13	Gould's	5	8		
C40	11	Gould's	5	6		
C33	8	Gould's	2	5	1	
C13	5	Gould's	1	4		
	2	Freetail		2		
C14	6	Freetail	2	4		
C17	4	Freetail	4			

C34	3	Gould's	3			
C29	2	Gould's	1	1		
C47	2	Gould's		2		
C03	3	Gould's	1			
C15	1	Freetail		1		
C20	1	Gould's	1			
	169	Totals	55	113	1	

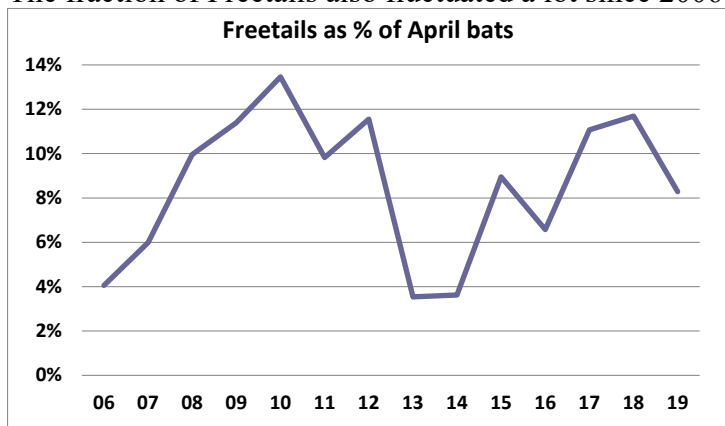
Bit of a surprise finding a bat still at the juvenile stage in late April, but breeding was very late this year due to the drought. Males and females roosting together as it is middle of the mating season, as well as adolescent males still not having dispersed. As the nights were becoming quite cool, no surprise that so many of the bats were in the thick-walled boxes (28 to 37) – 61 of them.

April bats

April bat capture peaked at 303 in 2011, declined for several years, rose again in 2015 and even more in 2017, and is now declining again, well down on last year, back to about where it was in 2007. We are slowly learning about the long cycles in the world of bats, affected by rainfall, food abundance, breeding success.



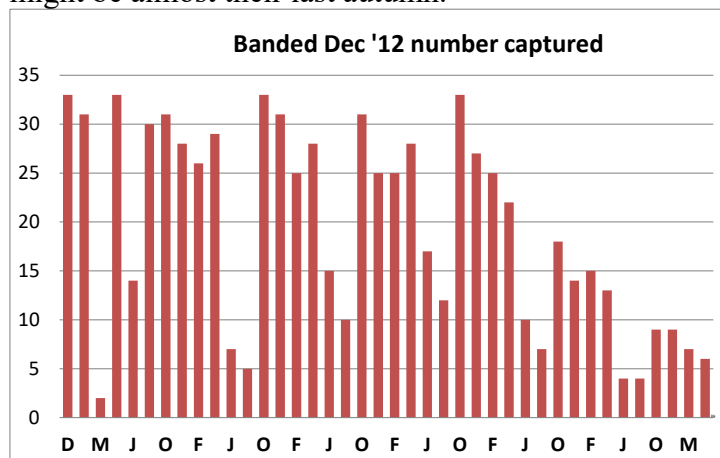
The fraction of Freetails also fluctuated a lot since 2006



Bats banded in December 2012

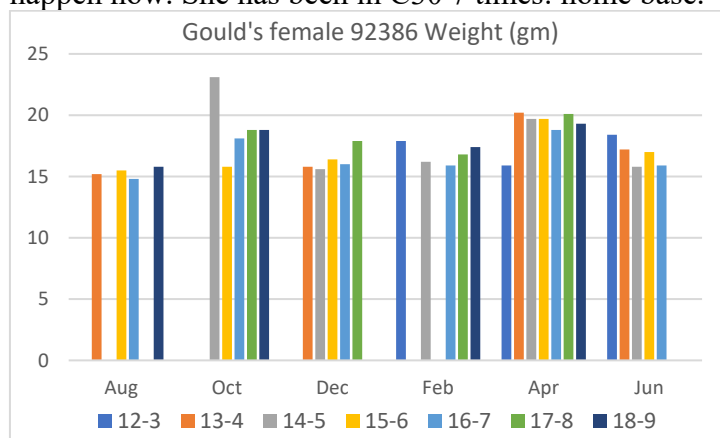
That's when banding restarted, so these are now very old bats. Once the adolescents had dispersed, there were 33 mature female Gould's and all of them remained in the colony until 2017, when many reached the end of their lives and that cohort started to shrink. This month

there were still six of them, spread over 5 boxes. This might be almost their last autumn.



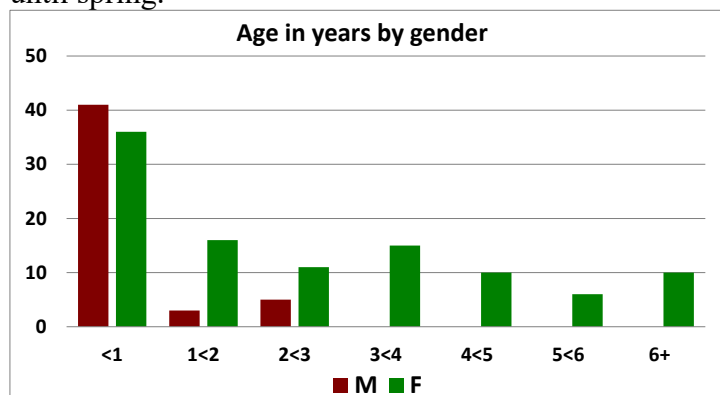
Gould's female 92386

She is one of the elderly females banded in Dec 2012, now captured 33 times, so we have a fairly complete record of her annual cycles. She was lactating in Dec '12 but still judged to be PP 8 times over the following two years. It's one of the reasons we now have a history file on each bat, so that sort of misjudgement can't happen now. She has been in C30 7 times: home base.



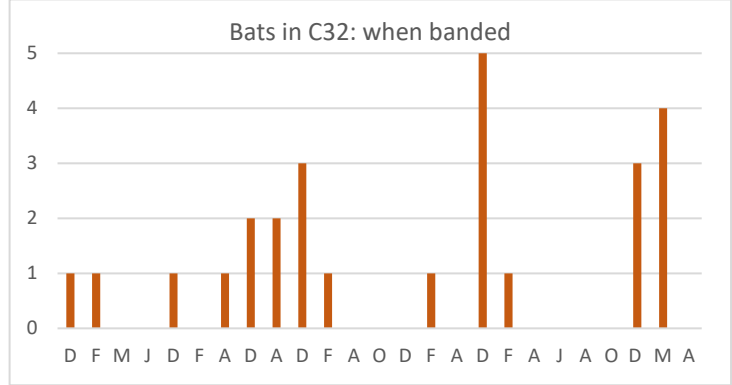
Community structure

As usual, all the old bats were females, the oldest male being just over 2 years, banded in the summer of 2016-7. Most of the young bats born last spring were still present. Many likely to leave in May, some might stay until spring.



Again, the mixed-age population describes not only the overall colony, but what was found in each box. For

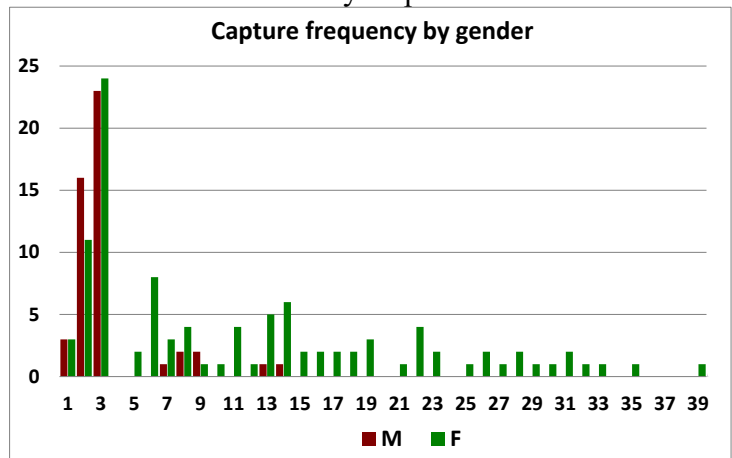
example, box C32 had this spread – oldest bats at left:



So one matriarch, banded in Dec. '12, with many younger bats of five generations.

Capture frequency

The old female 92336 has now been captured 39 times, and most of her age group more than 30 times, so the boxes are their home. No male has been captured more than 14 times. The tall columns at left are the adolescents who will likely disperse soon.



Next box check: Sunday 9 June from mid-day