

Bat box check: Organ Pipes NP 26 Oct 2014

A beautiful spring day, just before a big lightning-and-thunder storm late that night, but we were finished well before it let go. The usual Brushtail was curled asleep in its hollow log.



Stephen had a big team with him, and so did I.



Stefanie with bat hanger and Kristin doing the scribing



Stefanie had to go early – she's in year 11 with exams coming up, but was very excited to be involved in our

little project. Parting photo of her before she set off.



Big group of 35 Gould's in box 41, females all banded and pregnant



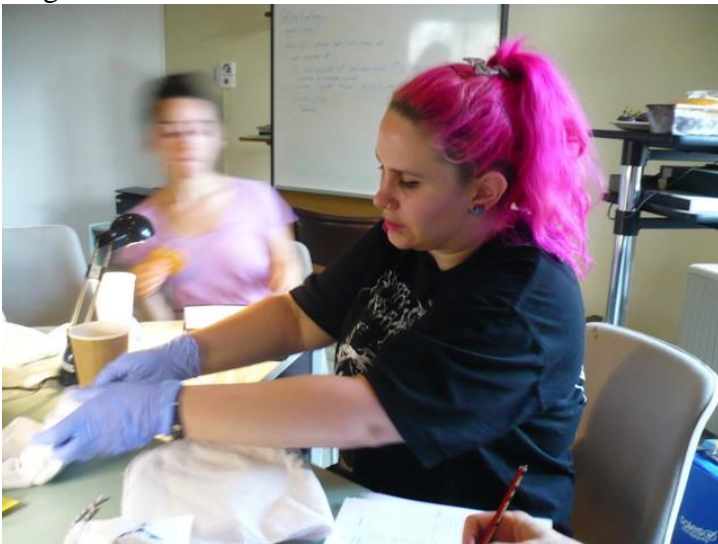
The bat-handling team arrived early and got started while the rest of us were still emptying boxes. We had 21 people altogether – an amazing team.



Several recent recruits had been vaccinated and wanted to start learning bat-handling skills – Louise Nicholas having her maiden effort at measuring a forearm.



Rev is an animal carer and wants to widen her skill range. Kristin scribed for her.



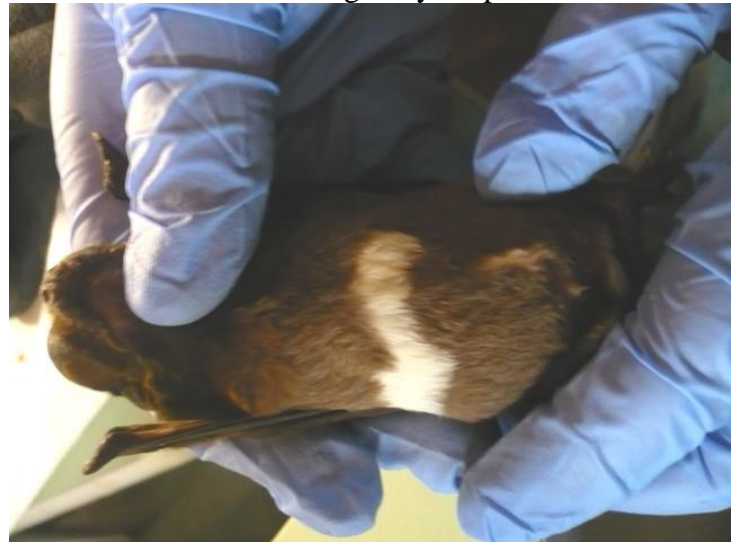
Michael Gooch had his first turn at assessing reproductive condition.



We had several bats with little signs of inbreeding, including a Gould's with a fair-sized patch of white fur on its right shoulder. This one was first banded in Dec '13, so is a one-year-old, and has not emigrated.



This is a Freetail with a big belly-stripe.



Anita Torrance processed lots of bats, with Jenn Miller scribing.



Casey was supported by scribe Lia Kantor. There were 99 pregnant Gould's, all close to full-term, and one had already given birth to twins: 92303, banded in Dec. '12, the month we started banding. Anthea Gurr came along to help, with two very young grey-headed flying foxes she is bottle-feeding, and between feeds she helped with

the microbats.



Rev also raises flying fox pups and posed with one, that was nuzzling for another feed.



When all the bat assessing was done, I brought out a cake to celebrate completion of 20 years of our bat project, which got started in November 1994.



A couple of little speeches, and a cake-cutting ceremony, to celebrate not only a very long-term project, but a very successful effort at team-building – we now

regularly get about 20 people coming to help. We were all done by dusk and drove down into the valley to release the bats. As usual the Gould's and Large Forest Bats were off in a flash and the Freetails sat on the bags and had a long think about it.

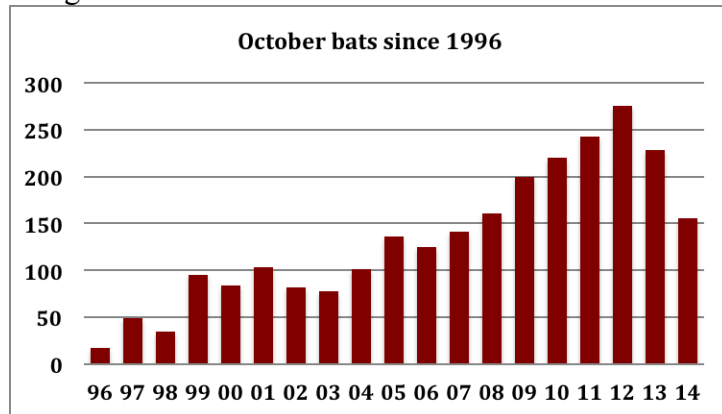


Box	Bat	Species	Adult		Juvenl		Esc
			M	F	M	F	
C01	36	Gould's	1	35			1
C41	35	Gould's	4	31			
C14	17	Gould's	1	16			1
C43	14	Gould's		14			
C06	9	Gould's	1	8	2		
C19	8	Lge Forest		8			1
C29	8	Lge Forest		8			1
	1	Gould's		1			
C23	5	Gould's	3	2			1
C15	6	Freetail		6			
C20	3	Gould's	3				
	4	Lge Forest		4			1
C42	2	Gould's	2				
	4	Freetail	2	2			
C34	3	Gould's	3				
C03	2	Gould's	1	1			1
C27	2	Gould's	1	1			
C10	1	Gould's		1*			
C13	1	Gould's	1				
C22	1	Gould's	1				
C28	1	Gould's	1				
C35	1	Gould's	1				
	164	Totals	26	138	2		7

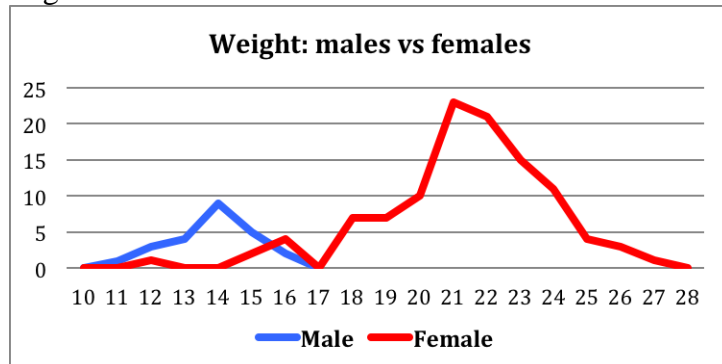
* 1 esc from C14, possibly recaptured in C10

Year	2010	2011	2012	2013	2014
Gould's	152	216	221	168	134
Lge Forest	49	10	10	59	20
Freetail	16	16	38		10
Total	217	243	221	228	164

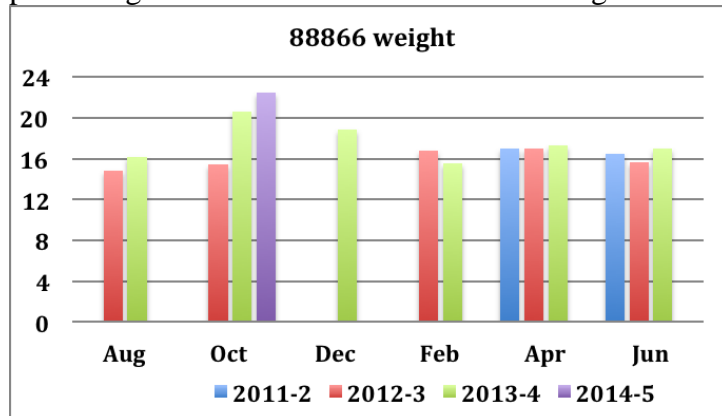
The catch of Gould's is well down on recent years, but all three species fluctuate quite a bit. Until 2012, the October catch seemed to be increasingly in a fairly straight line. Now we're back to the level of 2008.



The female Gould's were nearly all pregnant, most of them probably close to full term, so were far heavier than the males. Although it has been a very dry winter and spring, the weights of the heaviest ones are the largest we have seen.



One of the very old bats, 88866, has now been captured almost every box monitoring so we have a fairly complete weight record for her over three breeding seasons:

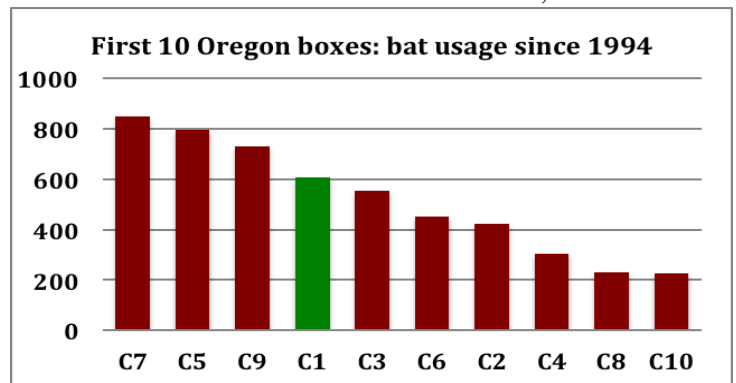


This includes three October weights. She has been pregnant in each of these years, and is heavier by 1.8 gm than last October. Timing of impregnation seems to vary from year to year, as in Dec '12 she was judged to be lactating, but in Dec '13 was already post-lactating.

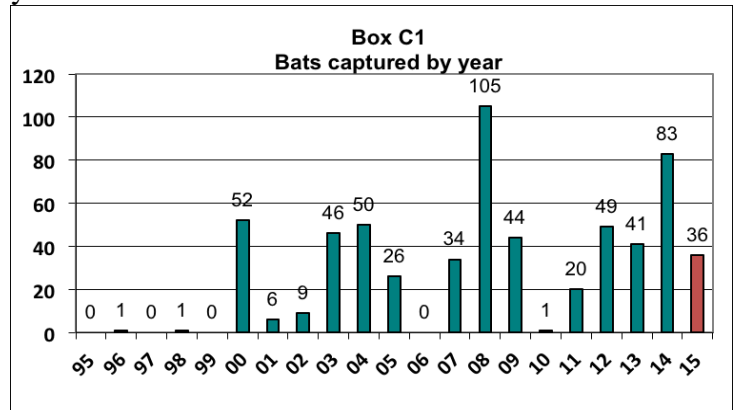
Box 1

This is one of the ten boxes, originally all of Oregon, set up in April 1992 and first used in late 1994. Boxes 1

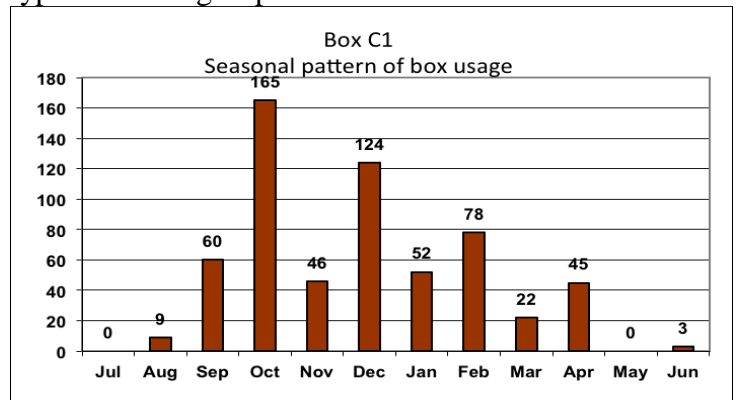
and 10 were the last to have bats found in them, in Dec 1995. Box 1 is not the most-used of them, but ranks 4th.



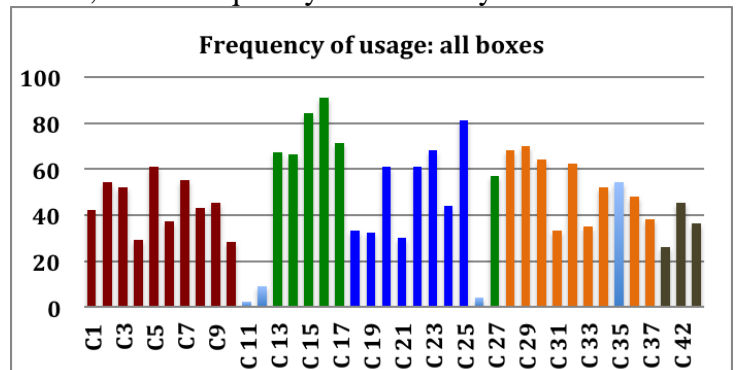
Its use has been very intermittent – every third or fourth year it spikes, then drops to a very low level for several years.



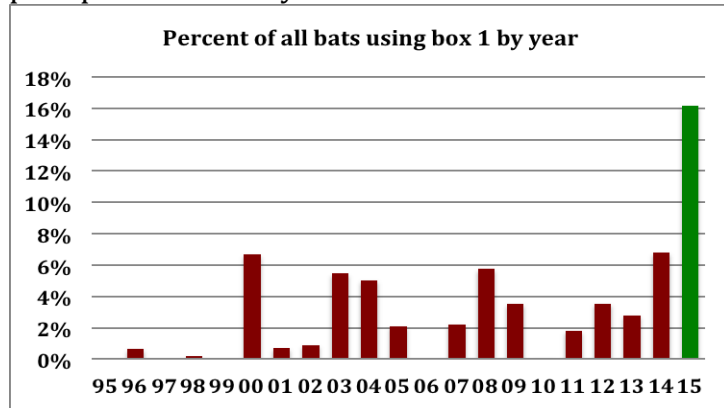
It is used mainly in spring, a bit less in summer, less again in autumn, and hardly at all in winter. This is typical of that group of boxes.



These first ten boxes have been up years longer than the others, but were quickly overtaken by boxes 13 to 17 in



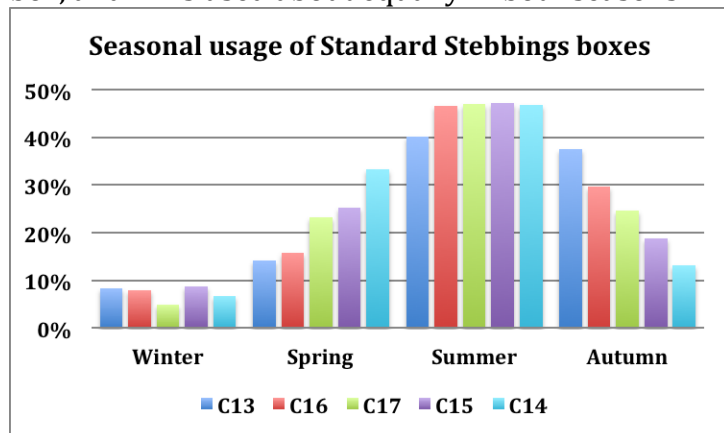
terms of how often we find bats in them, and even some boxes put up a decade later have overtaken this first set. Four of the little boxes that mainly attract Forest bats have overtaken these first 10, and four of the thick-walled boxes put up in 1998-9. The very large box 42, put up in 2005, has also overtaken frequency of usage of box 1. So the original boxes do get used, but have been largely displaced by those put up more recently.



For most of its history, box 1 has been a fairly insignificant attractant to the bats. This month's large group found in it is most unusual.

The 1996 Stebbings boxes

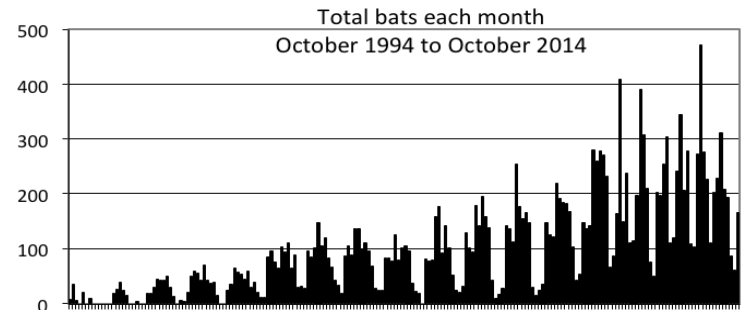
These five boxes were put up in 1996, two years into our project, once the original ten had all been used multiple times. The experience with them has been that they are used much and about equally in summer, very little in winter, and they vary along a continuum in whether the bats prefer them in spring or autumn. 13 is an autumn box, while 14 is a spring box, and 17 is used about equally in both seasons.



Incidentally, the tree with boxes 17 and 24 collapsed onto the ground between two other standing trees a few weeks ago, smashing box 24 into small pieces. 17 was on top of the log and survived intact. I've had a new box made by Hugh Davies, my box-maker, and will paint and install it soon.

Over the 20 years of our project, the number of bats

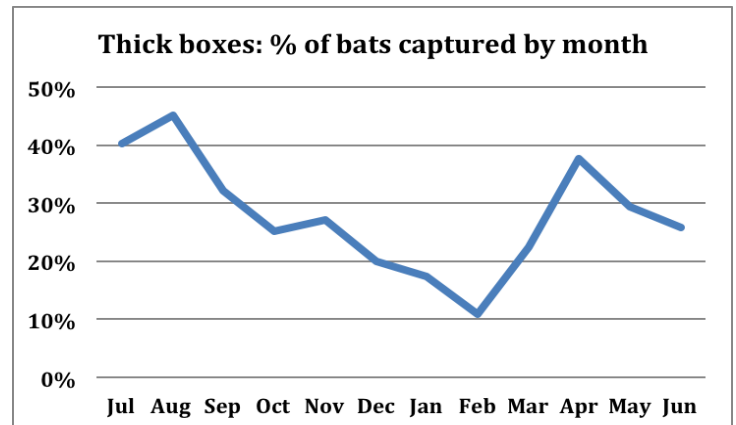
captured monthly has grown from 34 the first box check in Nov '94 to 470 in Dec. '12, peaking each summer and declining to a low in winter.



The big changes have been the growth in total bats using the boxes, the large increase in box usage over winter, and the expansion into more species than just the Gould's we got in the first two years.

First the small boxes: smaller in internal volume and in width of entrance slit, (12 mm). There are 8 of them and they have had 902 Large Forest bats in them, or 67.5% of that species. Another 28.5% have been in the thick-walled boxes and the remaining small percentage in the other box types. These small boxes were installed in 1997 with a different design in the hope they would attract the smaller bats. On a smaller scale, we have recorded 36 Chocolate Wattled bats, about the same size as the Large Forest bats. 32 of the 36 have been in these small boxes. We have also had 59 Southern Forest Bats, of which 54 (91.5%) have been in the small boxes. So that experiment has produced good results.

The thick-walled boxes were installed in 1998-9, in the hope they would attract bats in winter. This has been a partial success – they are most used in autumn and spring, much like the other boxes, but in the past few years we have had very large numbers of bats through winter and most have been in these thick-walled boxes.



Especially in August, near winter's end, these boxes have had almost half of all the bats using boxes.

Next box check: Sunday 7 December, 2 p.m.