

How did I get interested in bats?

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ABSTRACT

Being raised by parents who had an interest in natural history gave me a sound background for my future passion for bats. In the early 1960s there was a small core of bat researchers in Australia and these people were responsible for fostering my desire to study bats. From the mid 1970s the stimulus of other researchers and postgraduate students at the University of Queensland further deepened my interest in bats. As study animal, bats are both challenging and rewarding. We have still so much to learn about Australian bats and bats need all the help and positive publicity we can give them.

Key words: early bat research, CSIRO, UQ bat research

Background

For most of my adult life I have had a passion for bats. My quest to find out more about bats has influenced my lifestyle and employment and has resulted in my association with wonderful people and visiting fascinating places. My family was never surprised when on holidays I just happened to know where there was a cave or somewhere nearby where we could go and find bats. In this narrative I will describe how I first became interested in bats and what has sustained this interest.

In my early childhood days on our dairy farm at Nimbin, north-eastern NSW, I knew about flying foxes feeding around our fruit trees and I remember seeing micro bats crawling out of a fallen dead tree. My father was a keen naturalist and was very particular about bird names – “every bird has its own name son”, he would say. I learnt the local birds and their names and at primary school I was a source of class information on natural history – particularly birds.

In 1953 our family moved to Sydney. At Nimbin I was used to roaming around creeks with my dog and found the confines of a suburban back yard in Sydney a real imposition. Fortunately, nearby there was an area where I could escape, climb trees and generally run loose. This was in the swamps and mangroves skirting Hen and Chicken Bay in Sydney Harbour. This area, where I found many new species of birds and their nests, is now all sports fields. My mother bought me a copy of Neville Cayley's *What Bird is That?* in 1954 and I practised memorizing all the species on each plate. Several years later, when running detention classes as a high school prefect, I made students learn to identify five species (short detention) or ten species (long detention) of birds from my trusty *What Bird is That* before they could go home.

After finishing high school I enrolled at the University of NSW in 1960 to do chemistry (which I hated) for family reasons. During orientation week I met members of the UNSW Speleological Society. I was so excited to find out that there was a group of people that went exploring caves and I joined up immediately. We went caving about every second weekend and by the end of the first year I had visited many of the cave areas in eastern Australia.

The caving club members were mainly geology and engineering students. I was the only person interested in natural history and often went off bird watching during caving expeditions. Trip reports and cards from the CSIRO, Bird and Bat Banding Scheme asking for information on bats, were filled in after each trip. The cards were to help bat banders locate caves containing bats, particularly maternity caves. As a biologist, it became my job to fill in the bat cards after each trip.

While cave exploring we often saw bats and, as the only biologist in the group, and because these animals flew like birds, I was expected to know what species they were and to record this on the CSIRO cards. At that stage I did not know the difference between any of the cave-dwelling bat species – they were all just bats.

On a trip to Bungonia Caves in 1961 I came across some skeletal remains. One skull I could identify was a brush-tailed possum and I suspected that a couple of small fragile skulls had to be from bats. I took the skulls to the Australian Museum and the curator of birds, Allen Keast who I knew well, introduced me to Basil Marlow, the curator of mammals. “Yes”, said Basil, “they are bat skulls, but I will have to check what species”. Basil pulled out several books and flicked through their pages. He went off and returned with a box of small skulls. Basil started mumbling about condylobasal length, maxillary tooth row etc – words quite foreign to me, and after about 20 minutes Basil announced, “I don't know what species they are”! I was stunned. I remember that the first time I saw a Striated Warbler – I knew exactly what it was straight away. What was it with bats that made them so difficult to identify? Later in my career I was to ponder the same question.

After unsuccessfully trying to become an industrial chemist I fled to Canberra in 1962 in response to an ad by the CSIRO for a field assistant to work on a fauna survey in northern NSW – close to my old home town of Nimbin. The call of the wild and the thought that I would at least know many of the bird species made this career change appealing.

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On my arrival at the CSIRO Division of Wildlife Research I was informed that the fauna survey in northern NSW was not going ahead, but I could have a position in the rabbit ecology group under the leadership of Ken Myers. As this job involved field work at various sites in eastern Australia and the chance to continue studies, I accepted.

At the CSIRO Division of Wildlife Research (the name has been changed several times since) was a group of very keen naturalists and scientists. The divisional chief was Harry Frith, who had gathered together an impressive band of scientists and staff devoted to studying Australian wildlife. Among them were Ken Simpson and John McKean who both had a great knowledge of bats and birds. They were pleased to have a cave exploring natural history enthusiast join the division and in particular, because I had visited most of the major cave areas in eastern Australia, I was soon involved in trips to caves and helping band bats. It was very stimulating to be associated with these people and my passion for wildlife grew daily. Harry Frith was very encouraging and frequently approved the use of official vehicles for weekend trips to search for bats. Lunch and tea times at CSIRO were spent sitting around the tea table listening to Harry Frith, Mervyn Griffiths, Geoff Sharman, Alan Newsome, Ian Rowley and Ken Myers and other scientists discussing and planning their research. I also met Francis Ratcliffe, but at that stage of my career I did not realize the important contribution that Francis had made to flying fox biology. These times had a great influence on me and it was here that I fully developed my curiosity for the natural world.

Prior to my arrival at the CSIRO, the first bats to be banded in Australia were banded there in August 1957 by George Dunnet. He banded 179 bats from 3 species from the Canberra area. The first bat species to be banded was probably a *Chalinolobus gouldi*. George left the CSIRO shortly afterwards and David Purchase began regular banding of bats at Wee Jasper in March 1958. In July 1960, bat banding became an integral part of the Australian Bird Banding Scheme run by David Purchase at the CSIRO. The arrival of Ken Simpson and John McKean saw an increase in the interest of bats, and by the time I arrived in November 1962 there were 12 registered bat banders in Australia. These people formed the early core of Australian bat research and they all kept in regular contact with each other. Elery Hamilton-Smith (see Elery's paper elsewhere in this bat book) edited the first Australia Bat Research News in June 1964. Although much new information was being generated on bats, particularly by Peter Dwyer's research, we all had constant problems with species identification. Our basic species list was a provisional one prepared by John Calaby that recorded only 55 species.

In the mid 1960s many weekends were spent wandering around visiting caves and old mines, mist netting bats and birding. They were great years and via Ken, John, Graeme Chapman and John Calaby I learnt much about bats and birds. Canberra was full of public servants and many were my friends. They were always amused when I would say that I would rather be at work looking at bats than have a day off. Weekend parties were regularly

sacrificed in preference to a bird or bat trip to a place where a new species may be found.

My interest in cave exploring was also being well satisfied and I had a memorable trip across the Nullarbor with Joe Jennings. On this trip I collected a series of dehydrated bat bodies from Mura-el-elevyn Cave and promptly identified them as *Eptesicus pumilus*. In those days, any bat that was small, brown and lacked any special features was usually identified as *E. pumilus*. The bats turned out to be *Chalinolobus morio*! I published my first article on bats with John McKean in 1964.

The CSIRO Division of Wildlife Research had an extensive museum and specimens were being added regularly from fauna surveys from all over Australia and Papua New Guinea. With John McKean and later Greg Richards, I looked after the register for bats in the museum. This taught me a lot about bats, bat ID and the value of journals and a library. I developed a key for the bats of the ACT in 1967 to help with the museum work.

The tolerance of Ken Myers and Leon Hughes in allowing me to indulge in bat work as well as doing my official CSIRO work on rabbits during these years is gratefully acknowledged. They were both very helpful in reviewing early manuscripts. Ken also helped me obtain an undergraduate scholarship to the USA for a year (1968–69), where I first met Brock Fenton. I later spent time with Brock on the Alpha Helix expedition to Chillagoe in 1980. After the Chillagoe expedition, Brock gave a seminar at the Australian National University that stimulated Dedee Woodside and Greg Richards to propose the formation of the Australasian Bat Society.

In 1975 I moved to the University of Queensland to further my academic studies. At first I wanted to do something with bats, but as there was no bat-oriented person in the department, I chose an interesting project in marsupial embryology for my PhD with Leon Hughes as my supervisor. Mike Archer was at the Queensland Museum and we soon became friends. Mike asked me to help identify bats in the QM collection. I was working on a key for the bats of Queensland when Mike suggested that I turn it into an official Queensland Museum publication and make it for all of eastern Australia. I called on my mate Greg Richards at CSIRO to help out and in 1979 we published *Bats of Eastern Australia*.

In Brisbane it was not long before I was in the middle of flying fox issues and debates. Regular phone calls and meetings regarding flying foxes made Leon Hughes despair that I would ever complete my bandicoot studies. Allen Keast, who I knew from the Australian Museum and was in Canada, was editing a book *Ecological Biogeography of Australia* and contacted me to see if I would write a chapter on bats. This offer was too enticing to refuse. The head of my department at UQ also despaired at my bat activities and strongly suggested that I should become an expert on marsupial pituitary gland development and give up my "hobby" interest in bats. A sizable grant (in those days) from the World Wildlife Fund to Sue Churchill, Peter Helman and me to study rare bats across Australia in 1981 helped change his mind.

UQ became a centre for bat research in the 1980s. We held regular seminars and interesting overseas researchers

visited UQ. Jack Pettigrew and his Vision, Touch and Hearing staff, Len Martin and all his post graduate students, Paul Procriv, Mike Bennett, Mal Graydon, Dick Allison and the rise of flying fox carers such as Helen Luckhoff and ONARR (Orphan Native Animal Rear and Release), batty boat trips, Chris Corben and the development of his Anabat system, all made Brisbane a great place for bat research. My post graduate students, Jessica Worthington-Wilmer, Chris Pavey, Sue Churchill, Geoff Crawley, Martin Schulz, Martin Rhodes, Patrina Birt, Nicky Marcus, Shan Lloyd, Tajuddin Abdullah, Nancy Irwin and recently Billie Roberts all provided a very stimulating environment. I learnt much from them and enjoyed the relationship with my post graduate students. Their association was a rich and rewarding experience and I am pleased to see that many of them have been able to continue their interest in bats.

A special note has to be made regarding my friend and colleague Greg Richards. I first took Greg on a batting trip to Wee Jasper in late 1969, not long after he joined the CSIRO and I had returned from overseas. He became instantly interested in bats and we have shared many trips and experiences ever since. We have collaborated on many papers and reports and co-authored the book *Flying Foxes, Fruit and Blossom Bats of Australia* in 2000.

I first began corresponding with Merlin Tuttle when he was setting up Bat Conservation International while employed at the Milwaukee Museum. This has led to a long time friendship and I have enjoyed Merlin's company in both Australia and overseas. BCI has grown into an impressive institution, much as a result of Merlin's dedication to bats. His photographs of bats are amazing and I have been using them in my talks about bats for years.

In 1988 Jack Pettigrew and I went to Borneo to investigate flying animals. The diversity of bats, birds, and the caves – some of which were enormous, was a real mind blowing experience. Was this the ultimate

destination for a bird-watching come caver turned bat researcher? It was like I had found my ultimate dream location. There was so much to learn about Borneo's bats. The diversity of cave bats was very high and I enjoyed caving – what more could I desire? I have continued to visit Borneo (mainly Sarawak) and have had the pleasure of associating with Tajuddin Abdullah and all his post graduate students from the University of Malaysia, Sarawak. His students impart great enthusiasm and are a pleasure to be with in both laboratory and jungle. Check out their activities at < unimas, bat research >. For a number of years Taj and I have been working on a book *The Bats of Borneo*. Each week Taj and his students seem to find out something new about the bats of Borneo, making it difficult to know when to stop and publish the findings. We hope that this will happen shortly.

Recently I have been assisting researchers from the Australian Biosecurity Centre with field work on bats. Website www.abrcrc.org.au. Regular trips to monitor the health of Spectacled Flying foxes *Pteropus conspicillatus* with Andrew Breed and a trip with him to southern Papua New Guinea, allowed me to become familiar with several more species of flying foxes.

I am now involved in the production of several publications on Australian bats. One of them is a bat book for children, something I have wanted to do for a long time. It is important that future generations have a good knowledge base when it comes to bats. For too many years there have been misconceptions and a bad public image of bats. Hopefully future generations will be more enlightened when it comes to bats.

So that is how I became interested in bats and what has maintained the fascination. My involvement with bats has been a fulfilling experience. Along the way I have met some wonderful and fascinating people, seen some amazing sights and above all, had the pleasure of associating with one of nature's most enchanting animals.

References

McKean, JL and Hall, LS, 1964. Notes on Microchiropteran bats. *Victorian Naturalist*. 81: 36–37.

Hall, LS and Richards, GC, 1979. *Bats of Eastern Australia*. Booklet 12, 66p. Queensland Museum, Brisbane, Australia.

Hall, LS and Richards, GC, 2000. *Flying Foxes, Fruit and Blossom Bats*. University of New South Wales Press, Sydney, Australia.

A full list of publications is available by contacting the author.

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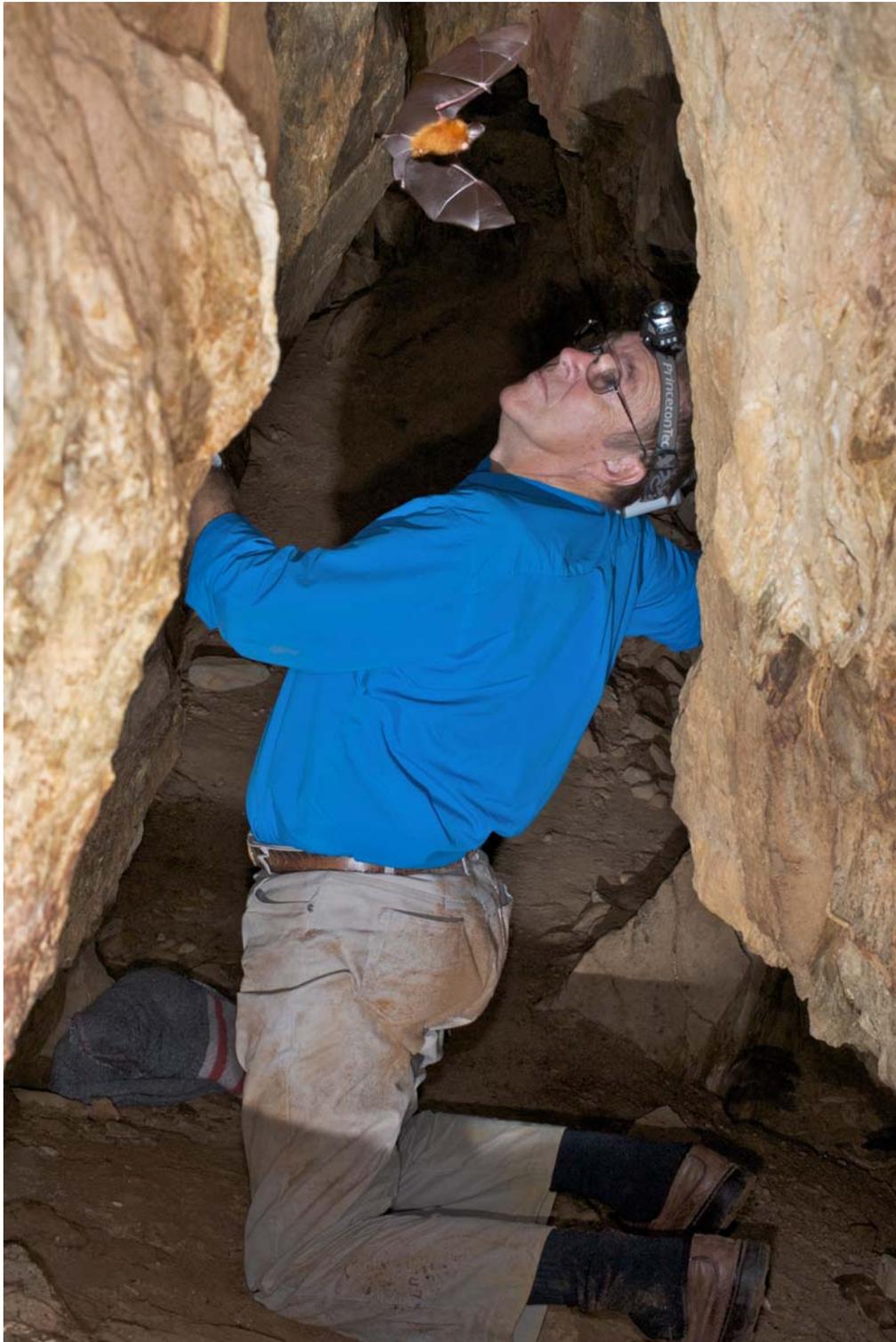
Appendix



The late John McKean. The photo was taken in 1961 when mist netting bats at Tianjara, on the road between Nowra and Braidwood. John was a major publisher of bat articles and my major stimulus and companion for early bat activities in the 1960s.



Les Hall crawling through a squeeze hole in Mammoth Cave in the non-tourist area of Jenolan Caves.



Les Hall gets up close to a Dusky Leaf-nosed Bat in a north Queensland cave.
Photo by Steve Parish, Bramston Beach, August 2008