



# TO NAME, OR NOT TO NAME?

## Simon says: stick to numbers

I think that most, if not all entomologists, will confess to a bit of funding envy when talking with those of their colleagues who work with the “undeserving 3%”, the large charismatic mega-fauna and the modern dinosaurs. The terminology gives us away, although the evidence is overwhelmingly [on our side](#). As entomologists, particularly those of us working in the field, we are used to reporting numbers collected in the tens of thousands, if not the hundreds of thousands, and even a short six-week study can result in the capture of thousands of ground beetles. Naming our subjects, much as we love them, is not an option, even if we wanted to. Even behavioural entomologists counting individual flower visits by pollinators are used to dealing with hundreds of individuals. In the laboratory, although numbers may be smaller, say tens, we still assign them alphanumeric codes rather than names, even though one might look forward to counting the number of eggs laid by the unusually fecund moth #17 or hope that aphid #23 will be dead this morning as she is becoming a pesky outlier for your mortality data.

Our colleagues who work with mammals in the field seem, however, to adopt a different strategy. It appears quite common for them to name their animals, as the examples from Twitter on the next pages make clear.

My concern, highlighted by these examples, is that by naming their study animals, the observers are anthropomorphising them and that this may lead them to inadvertently bias their observations. After all, the names have not been chosen at random, and thus could influence the behaviours noted, or ignored. I say ignored, because of two very specific examples, there are more, but I have these two to hand.

Victorians used birds as examples of good moral behaviour, erroneously believing them to be monogamous, probably because of seeing the way they fed their chicks cooperatively. In his book *Promiscuity. An Evolutionary History of Sperm Competition and Sexual Conflict*, Tim Birkhead

That, is the question. At least on the minds of Simon Leather and Anne Hilborn. They present their opposing opinions on whether study animals should get names, or just numbers.

**Trent Forge**  
@TrentForge

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Meet 'Calvin', our third spotted-tailed #quoll for Cathedral Rock NP. Not even 1yo and already a handful. #wildoz 🌿🐨



RETWEETS 71 LIKES 127



quotes the Reverend Frederick Morris who in 1853 preached: "Be thou like the dunnock – the male and female impeccably faithful to each other." He goes on to point out that despite a hundred years of ornithological science it was not until the late 1960s that the promiscuous behaviour of female birds was revealed, interestingly enough coinciding with the new moral code of the 1960s. Note that Tim Birkhead also falls into the very trap that he describes by using the word promiscuous in the title of his book, a human judgemental term relating to moral behaviour, multiple mating would have been more appropriate.

Descriptions of penguin homosexual behaviour and their penchant for acts of necrophilia so shocked

George Levick's publishers that they removed them from his 1915 report but printed them and privately distributed them to selected parties marked as "[Not for Publication](#)". He also transcribed his descriptions of this 'aberrant' behaviour in Greek in his notebooks, presumably to make it less accessible.

And finally from me, there's a recent report about '[sacred and ritualistic](#)' behaviour in chimpanzees, where I feel the authors have really allowed themselves to over-anthropomorphise with their subjects, very much to the detriment of scientific detachment. I have yet to find an entomologist who agrees with their interpretation.

Over to you Anne...

**Anne Hilborn**  
@AnneWHilborn

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Apollo and Bacchus scarfed the gazelle in an hour then DID NOT CLEAN EACH OTHER FACES OF BLOOD!



RETWEET 1 LIKES 6



1:14 PM - 4 May 2016

## My name is Anne, and I name my study animals.

Decades ago this might have gotten me jeered out of science, the assumption being that by naming my study animals I was anthropomorphizing them and that any conclusions I drew about their behaviour would be suspect. Thankfully we (at least those of us who have the privilege of working on megafauna) have moved on a bit in our thinking and our ways of doing science.

There are two parts to Simon's concern about naming study animals. One is that naming leads to anthropomorphisation, the second is that the anthropomorphizing leads to biased science. I would argue that the naming of study animals doesn't necessarily increase anthropomorphism. On the Serengeti Cheetah Project, cubs have a high mortality rate so we don't name cheetahs until they are independent from their mother. During my PhD fieldwork I spent a lot of time following a young

Subject	Sex	Age	Categorization Training A	Categorization Training B	Additional categorization Training A	Transfer test
Kofi	Male	7	7			2
Riet	Female	35	14			2
Lobo	Male	9	17			2
Lome	Male	11	19			2
Tai	Female	10	28			2
Franlje	Female	37	40			2
Sandra	Female	19	(40)	5	3	3
Kara	Female	7	(40)	13	8	6
Robert	Male	37	(40)	(40)		
Corrie	Female	36	(40)	(40)		

Numbers in parentheses indicate that criterion was not reached within reported number of sessions

male known as HON752MC (son of Strudel). Several months after I started my work he was named Boke. My interest in his behaviour, my chagrin at his failures and happiness when he had a full belly, didn't change when he was named. Many of us get emotionally attached on some level to our study animals, whether they have names or numbers.

An interesting thing to ponder is that if naming does lead to anthropomorphizing, does it only happen when human names are used? What human characteristics am I likely to attach to cheetahs named Peanut, Muscat, Strudel, Fusili, or Chickpea?

As to whether anthropomorphism leads to biased science. It definitely can if, as Simon points out, certain behaviours are not recorded because they do not fit the image of the animal the researcher had in their head. I don't have any data on this, but I suspect this is extremely rare nowadays. Almost all researchers have had extensive formal training and know the importance of standardised data collection. I study cheetah hunting behaviour, and I record how long a cheetah spends stalking, chasing, killing, and eating their prey. I record the number of animals in the herd they targeted, how many seconds the cheetah spends eating vs. being vigilant, and at what time they leave the carcass. No matter my personal feelings or attachments to an individual cheetah, the same data gets recorded.

Research methods have advanced a lot in the past decades and we use standardised methodologies and statistics expressly to prevent bias in our results. Anthropomorphism is just one possible source of bias, others include wanting to prove a treasured hypothesis, the tendency to place plots in areas where you suspect you will get the best results, the list goes on.

As Adriana Lowe puts it: "Basically, if you've got a good study design and do appropriate stats, you can romanticise the furry little buggers until the cows come home and it won't have a massive effect on your work. Any over interpretation of results would get called out by reviewers when you try to publish anyway."

Simon points out examples of people being shocked when birds didn't follow the dictates of contemporary



human morality. I would like to think that biologists no longer place human values on animals. I can admire hyenas because the females are bigger bodied and socially dominant to males, but that doesn't mean I draw parallels or lessons from them to human society (not in the least because the females give birth through their elongated clitoris and the cubs practice siblicide). As scientists we are capable of compartmentalising, of caring deeply for our subjects, of shedding a tear when Asti turns up with one cub when previously she had five, without that changing the way we record data. In our training as biologists, we are taught not to impose our own feelings or values on our study animals. We may find infanticide in lions, extra pair copulations in birds and primates, or siblicide in boobies to be repugnant, but we record, analyse, and try to publish on the phenomenon all the same.



A cheetah named Strudel.

© Anne Hilborne

To go on the offensive, there are ways that naming study animals actually improves data collection. Again, I quote Adriana Lowe. "If you're doing scan sampling for instance, so writing down all individuals in a certain area every 10 minutes or so, names help. At least for me, it's harder to remember if someone is M1 or M2 than Janet or Bob, particularly if you have a big study troop/community. So it can improve the quality of the data collected if you're less likely to make identification errors."

Because of our own training and peer review, assigning emotions or speculating about the intent on animals rarely makes it into scientific papers. However, the situation is very different for those of us who wish to present our results outside of the ivory tower. While fellow scientists might be willing

to wade through dry descriptions about how M43 contact called 3 times in 4 minutes when he was no longer in visual contact with M44, the public is not. Effective science communication needs a story and an emotional hook to draw people in. It is much easier to do that when you tell a story about Bradley and Cooper and not M43 and M44. I will admit this does get into grey areas with the type of language we use outside of scientific papers. I tell stories about the cheetahs in my blog posts and even assign emotions to individuals. But if I am answering questions from the media or the public, I am still very careful not to make any definitive claims about behaviour that haven't been backed up by statistical analysis.

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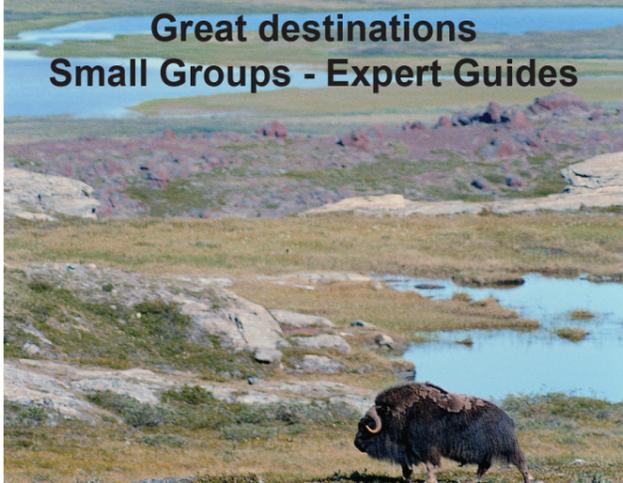
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