THE TRAVELLING VET

From Pets to Pandas: My Life with Animals

JONATHAN CRANSTON



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To Max: true friend, companion and teacher



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PREFACE

A nimalia. The term incorporates an untold number of eclectic animals that inhabit our planet. Estimates of individual species range from 2 to 50 million. For many people, they are simply the sporadic cohabitants of their world – the spider in their bathtub, the bird in their garden, the rat in their garage, or the monkey that plagues their market stalls. For me, though, they have always been an intrinsic part of my life. I trace my conscious desire to become a vet back to the age of six.

Fast-forward thirty-one years, and now eleven years after qualifying, my passion is if anything stronger than ever. Annual trips to Africa, and the wide range of species I have been fortunate enough to work with, have only served to broaden my horizons as to how spectacular the animal world is. Where my three-year-old self was once content with chickens, lambs and dogs, his thirty-seven-year-old counterpart now deals with giant pandas, giraffes, leopards and rhinos – wonders at them, in exactly the same way. For just as an addict craves his next fix, or a surfer longs for that next big swell, my drug of choice has always been the animal kingdom. I have always been captivated by meeting and treating any new species, so to experience them at first hand in their natural environment, learn about them, and make a positive contribution to their propagation, has been a constant privilege.

What started off as the dream of a six-year-old boy to become a vet has now evolved into a desire to travel the world and encounter the spectacular diversity of animals that share this planet with us. From the prehistoric Nile crocodile to the endearing sugar glider or enigmatic snow leopard, the more variety I encounter, the more it fuels my passion.

Yet this evolution in my interests has not detracted or diminished from the joy and thrill I still get every day as a rural veterinary surgeon in the UK. Eleven years in, and the job is still as fascinating and challenging as ever. No two days have ever, or will ever, be the same, and when I go into work in the morning I never know what the day will hold, or which animals or situations I will encounter. Dog, cow, rabbit, horse, chicken, pig, alpaca or tortoise; death, life, tragedy, triumph, hilarity, solemnity, routine or bizarre – mine is a completely unique profession. Every day is an emotional rollercoaster, where the minute you think you've cracked a problem, something always pops up to remind you of how much you still have to learn.

There's a common misconception that being a vet is all about working with animals. The truth is that it is as much, if not more, about working with people. The best vets in the world will only have a reputation to match their skill if they can communicate well with people. But it's only when this is fully comprehended and embraced that the beauty and power of the human-animal bond can be fully appreciated, as wonderful and unique a relationship as any individual human being on the planet. The Inuit who relies on their pack of sled dogs for transport, or the Nepalese farmer on their ox to plough; the Mongol who requires their eagle to hunt; the farmer who knows every one of their cattle by name; the zookeeper who daily feeds and cares for their collection; the widow whose only companion is her dog; the child with their first pet: whatever the circumstance, veterinary intervention invariably involves understanding and managing this relationship, sharing the joy

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or sadness, gently correcting or encouraging, asserting or humbling yourself, as the situation demands.

For me, this relationship adds great joy and interest to my job, and although I have witnessed some incomprehensible acts of animal cruelty, the vast majority of my experiences have highlighted the very best in human nature, and I have felt as privileged to meet the people who care for this vast array of animals as I have to treat the animals themselves.

In this book I hope to convey my passion for a job that I love, to give the reader a sense of how weird and wonderful a veterinary surgeon's life can be, as I recount true stories that range from the inspiring to the absurd. Some names and locations have been changed to protect identities. Some of these animals were pets, some livestock, and others were from zoological collections or encounters in the wild. I have also set out to share some facts about these wonderful animals and to highlight the plight that too many of them are facing. There is no chronology to the stories I tell, or the species I mention, nor do the episodes I recount present these animals in alphabetical order or by geographical distribution. The beauty of life - of all life - is its rich and random tapestry, and one of the fascinations and great joys in mine is never knowing what will happen from one day to the next, or who will come through the door.

So do, please, step into my consultation room, for this book is your own consulting list, and each chapter introduces you to a new client: a different animal with its own individual and unique problem.

> Jonathan Cranston March 2018

INTRODUCTION

'The greatness of a nation can be judged by the way its animals are treated.'

Mahatma Gandhi

here can't be many vets who have stitched up a dinosaur. It's not the sort of ambition that would be taken too seriously by a careers teacher. Mine had even advised me against applying to vet school. He felt the course was too competitive and that I might struggle. After thirteen rejections, he might have had a point, but the ambitions of a six-year-old boy were not easily going to be thwarted. And now eleven years after qualifying, not only am I a vet, I have worked in nearly every facet of my profession, across four continents, treated some of the most iconic animals on the planet, and offered veterinary expertize on a multi-million-dollar Hollywood blockbuster. As I reflect on it now, I still can't quite believe it myself.

'There are a million ways to live a life, my friend.'

Bill's words echoed around my head as I gazed out of the car window. It was a mild, wet November morning, the kind that feels more autumnal than bracing winter. Bill, a family friend, and I were winding our way through the pretty villages and valleys of the Brecon Beacons, the low-lying mist creating an eerie wonderland around me. I thought of the people who lived behind the doors we were passing, the farmers who worked the beautiful landscape, the shopkeepers, postmen and bus drivers. They were all living their lives, and within each came a multitude of choices, a host of possibilities, stories, tragedies, wonders, that had led them to the life they were living on this wet November day in 2015.

As for me, my life could easily have turned out so differently. I had wanted to be a veterinary surgeon since the age of six. I mean, I really wanted to be one, and nothing could, would or ever did change my mind. Although the clues were probably there when I was even younger. Early pictures show me with chickens or lambs under my arms as soon as I could walk, or falling asleep next to my grandparents' golden retriever. You could say it was what I was born to do, and I never wavered. Yet on Sunday, 13 August 2000, I found myself preparing to study Pathology and Microbiology at Bristol University, having been rejected at least twice from every veterinary school in the UK - and once from University College Dublin. The previous year I had turned down an offer to study Zoology at Liverpool, and taken an enforced gap year in the hope that I would later get a veterinary place somewhere, anywhere. Where would I have been in 2017 if I had chosen a different path? A different city, different friends, a different career - my mind reels at the millions of permutations. And even within the veterinary career I eventually pursued, it could all have been so different.

I remember sitting round the table one evening, with a handful of friends, in my parents' living room, towards the end of my eighteenth birthday party, as the music started to fade and lights to come on, supping on the remnants of my beer. Empty bottles, half-drunk glasses, red wine stains on the tablecloth, half-finished plates of finger food and bowls of crisps and nibbles surrounded us. My parents were busily tidying up around us as we continued chatting, entering that marvellous reflective mood, preparing for the next big step of our lives, and contemplating our hopes, ambitions and dreams. Where would we each be in ten years' time? For me, the answer was quite

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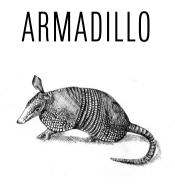
simple. I would be in the middle of a field at six o'clock on a damp, foggy spring morning, with the sun just starting to break through. My green Land Rover Defender would be parked with its back door open, and two dogs would be running around the field. I would be a few yards away, lying prostrate at the rear end of a recumbent cow, assisting her to calve while the farmer stood over me, offering words of encouragement. All I had ever dreamed of being was a regular, country, mixed-animal vet.

And ten years on, at the age of twenty-eight, that is exactly what I was – though for 'Land Rover Defender' read 'Isuzu Trooper', and make it one dog – Max – rather than two. I had found myself being offered my dream first job out of vet school, working down in rural North Devon. But then fast-forward another seven years: I had worked on four continents, and had treated over a hundred different species – everything from the routine dog, cat, cow, horse, pig and sheep, to the more exotic snow leopard, elephant, rhino and giant panda (to name just a few). And now I am consulting on film sets, including advising on extinct dinosaurs. It certainly was an unusual and unplanned career path that I had taken. But that's life: things happen, opportunities present themselves, and choices get made.

So wise old Bill was right, there truly were a million different ways to live a life, not just as one of the 7.2 billion people on the planet, but as one of 20,000 veterinary surgeons in the UK. Now ten years qualified, though, the rose-tinted spectacles had long been removed. I had battled through the application process, competing for a place on the intense and protracted course, eventually qualifying, relocating far from my support network, starting out in a job where the days were long, lonely, demanding and stressful, as well as being both physically and emotionally draining. And despite the pride I have always taken in those privileged initials MRCVS (Member of the Royal College of Veterinary Surgeons), it is sobering to reflect that my chosen profession consistently ranks among those with the highest suicide rates, and which, contrary to public perception, generally pays its employees less than the minimum wage when calculated against hours worked. I had a plethora of scars and injuries having been bitten, kicked, scratched, stabbed, cut, stitched up, stood on, squashed, stamped and charged. I'd been covered in every possible bodily fluid: blood, pus, urine, diarrhoea, amniotic fluid, rumen contents, anal gland secretion, decomposing tissue. I had accidentally jumped into a silage pit, driven into two ditches, fallen into a pond and had even been hospitalized with a twolitre pleural effusion after contracting bovine tuberculosis and then having to undergo a year of treatment.

So if I had my time over again, would I change anything? Would I go back and tell my six-year-old self that the game wasn't worth the candle, and to set his ambitions on something else? Gazing out the window on that November morning, and reflecting on what I had done over those ten long years, the people I had met, both colleagues and clients, the animals I had worked with and treated, the experiences I had gained, and the places I had visited, I knew without a moment's hesitation that the answer was an emphatic 'No'.

In fact, it now struck me, I was only just getting started.



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'Armadillos make affectionate pets, if you need affection that much.'

Will Cuppy

The animal kingdom is vast and incredible. I personally think it's impossible not to watch nature documentaries without being filled with awe and amazement at the array of different types of animals with whom we are privileged to share this planet.

It is a common assumption that, as a veterinary surgeon, I will automatically know about, and be able to treat, any animal that finds itself on the consulting-room table, or behind a stable door. So it often comes as a shock and disappointment to others when I confess that I don't immediately know, say, the common ailments of *Triturus cristatus* (the great crested newt). That said, I still love that assumption, and I have tried my hardest to fulfil it, but sadly, even over a five-year degree course, there are several species that just don't make the cut. The maned wolf, the giant panda, the snow leopard and the pufferfish, to name but a few.

So how does the veterinary curriculum work? Well, there are six main species we study in great depth at veterinary school, and they are all mammals: the horse, the cow, the pig, the sheep, the dog and the cat. A few weeks' teaching is given over to 'small furries' (rabbits, hamsters, guinea pigs and the like), with a couple of days allocated to reptiles and birds, and maybe the odd hour to amphibians and fish. This may seem woefully inadequate, particularly if you are a lover of one of the many species that doesn't feature prominently in the veterinary curriculum, but let's think about this for a minute and do some maths. At a conservative estimate there are 8.7 million different species on the planet, so in a typical degree course we would have precisely 18 seconds per species to learn everything there is to know about their anatomy, physiology, behaviour, therapeutic pharmacology, medicine, surgery, dentistry, endocrinology, oncology, and reproduction. Oh, and that would be studying twenty-four hours a day, seven days a week, for the entire five years, and with no time to prepare for the biggest part of the job, namely the three Cs of human interactions: care, compassion and counselling. So unfortunately, but I hope understandably, there have to be one or two omissions.

For some, gaining an MRCVS qualification is just the first step in a lifetime's journey of studying these more exotic animals, and for the rest of us these specialists become the go-to-gurus. For those in general practice there are several skills we have to learn to mitigate this knowledge deficit. Firstly there is the principle of animal comparisons. For example, to most intents and purposes, you can treat a rabbit as if it were a miniature horse: they are both hindgut fermenters, doing most of their digestion in their caecum, and have hypsodont teeth meaning that their teeth continually grow. Alpacas and llamas are both ruminants like cattle and sheep, and ferrets share many characteristics with dogs. Then there is the idea

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of lateral thinking. If I am treating a dog with diarrhoea, who has involuntarily redecorated his owner's sitting room, I am faced with a series of questions. What has caused it? What body systems are involved? What are the animal's immediate and long-term requirements? Is it dehydrated, requiring fluid therapy? Does it have a bacterial infection, necessitating antibiotics? Does it have a parasitic burden and require deworming? Or has he just gorged on the family's Sunday lunch? If I can solve the puzzle for a dog, why can't I solve it for a meerkat, reindeer or wallaby? And, of course, if all this fails, there's always Google . . .

Yes, I confess that in my ten-year career I may have referred to Google one or two or several hundred times. I remember the first occasion. I was a couple of months qualified and my boss, Simon, asked me to do a home visit to inject a client's private collection of green tree pythons. Several of them had gone down with a respiratory infection caused by mycoplasma and, given the value of such a collection, Simon had suggested treating them all. I was game and eager for anything. Besides, it was my boss's request, so I did not feel I could refuse. The only problem as I saw it was that I had never even heard of a green tree python before, let alone known anything about them. And as the 'newbie', I would need to gain the client's trust as well as fending off a barrage of questions over the hour it would take to treat every one of his ten snakes. I did not want to appear a complete ignoramus, of course, and so knowing that attack is often the best form of defence, I thought if I could drop in a few useful facts early on, I might just gain his confidence and respect enough to transform this daunting visit into a more manageable and interesting experience. So to Google I went. I discovered that Morelia viridis is found in or near the rainforests of New Guinea, the Indonesian Islands and Cape York Peninsula in Australia, thus requiring a hot humid environment. As its name suggests, it lives mainly in trees, and feeds on small rodents and reptiles. They require a certain expertize to keep in captivity, but if conditions are right then they'll thrive. Armed with this knowledge and feeling a bit more confident, I set off.

The owner greeted me suspiciously, clearly assessing my credentials as a veterinary surgeon to the herpetoculture community. I smiled warmly as I introduced myself, trying to disguise my trepidation. I was going to have to work hard to earn his trust, I could see, but I wasn't surprised: a collection as extensive as his was worth several thousand pounds, so this was a serious hobby. He took me through the house to a purpose-built reptile house in the garden. It was an impressive set-up. The heat and humidity hit me instantly and I felt like I had just stepped into the Amazon Jungle. There were half a dozen vivariums in a 'U' shape against the three walls, all just a mass of green arboreal foliage camouflaging the occupants within. Next to each glass tank was a digital monitor displaying its temperature and humidity. I'd only ever seen such a professional set-up in a public reptile house before, and I realized this guy definitely knew what he was doing. I felt way out of my depth, but tried to compose myself. After all, all I had to do was inject them, and I had done that before. But this was someone from whom I could learn a lot, so I had to pitch it just right. He had to feel confident and comfortable with my professional ability, and able to relax enough to start talking about his passion, rather than being guarded and protective over his babies. I knew I had a limited window of opportunity to make an impression, and this was it.

'The humidity really hits you when you walk in,' I began, 'we could actually be in a New Guinea or Indonesian rainforest.' It wasn't my best one-liner ever. It was a start, but I needed to follow it up.

'They can be pretty difficult to keep in captivity, replicating their natural arboreal environment, but I have to say this is the most impressive set-up I've ever seen.' The compliment paid off; I could sense him start to relax. Maybe one more would do it. I wandered over to one of the vivariums and peered in. The camouflage was incredible and it took me a moment to see the occupant. Saddling one of the branches in three coiled loops, her head resting in the middle, was a stunning lime-green snake with flecks of white across the whole of its body. I'd seen pictures on Google, but in real life they were truly incredible.

'I love the unique way they saddle a branch . . . They really are so beautiful.'

That final comment was enough to engage him, and his guard went down. It was as though I knew the secret handshake to the club. I was in! As we proceeded with the task in hand, he started telling me about each snake individually as I injected it. The job was quickly done, but with plenty more serpentine knowledge to share, and a captive audience to share it with, he offered me a cup of tea. Fascinated with what I was learning and relieved that the visit had gone so well, I happily accepted. An hour later I finally left and the warmth with which he bid me farewell felt like a lifelong friendship. As I walked down the drive to my car, I allowed myself a smile of satisfaction. From then on, whenever he rang the practice he always requested 'the veterinary herpetologist'.

Google paid off on that occasion, but I'd had a leisurely half-hour lunchbreak in which to do my research and preparation. The next occasion it came to my rescue I was not afforded the same luxury.

I've often been asked what the strangest animal I've ever seen in the consulting room would be. There are a few contenders – a Cuban tree frog, a sugar glider and a skunk would probably make the top ten – but there was one consultation that will forever stick in my memory: the armadillo.

It had been a regular Friday in March. I'd started my day at 6 a.m. on the middle of Exmoor reading a tuberculin test for a herd of sixty cattle. It was a cold morning and we were working in a small dilapidated farmyard miles from any other human habitation. The single intradermal comparative cervical tuberculin test (SICCT) is the standard TB test for cattle. Dating back a hundred years, it involves injecting the skin on the animal's neck with avian and bovine tuberculin, then returning seventytwo hours later to inspect the injection site: if the bovine site has swollen more than the avian site it is highly suggestive that the animal has the disease. This was my return visit, and I knew that the second part of the test was not going to be completely straightforward; it never was with the Exmoor cattle. This was an eclectic herd of year-old animals, which had been bought from market as calves and barely known any human interaction from the day they stepped off the lorry. All were hybrid breeds, mostly from a Friesian-Hereford mother crossed with a beef bull such as a Charolais, Aberdeen Angus, Belgian Blue, Simmental or Limousin. It was the Limousin crosses that always caused the problem. Wild and liable to spook, it only required one of those in a herd to set the rest of the group off. I had spent enough time chasing flighty cattle across fields, marshes and moorland to know that it was always them leading the charge. While my Tuesday visit had gone smoothly enough, the cattle were now primed, wary of the cattle crush - and of us.

As we let them out of the barn into the orchard, the leading steer told me all I needed to know. Head up, eyes alert, snorting as he trotted at a fast pace, he was wild and agitated. In that moment I knew this job, which could have been over and done with in half an hour, was going to take several hours, and require Land Rovers and quad bikes to chase the herd over

the moor. Sure enough, the steer immediately led the charge, jumping and circling in the orchard, looking for any weakness in the gate, wall or hedge. After a few moments he found it, and headed for the 4-foot gate separating the orchard from the field and moorland beyond. Making a poor attempt to jump the gate, his back quarters landed on the gate, buckling it, but his momentum was enough to snap the bail twine that had fixed it to a rotten post, and so the gate was dragged 10 metres into the field before the steer finally cast it off as he bolted for freedom. With no gate, and the field and freedom so inviting, the rest of the herd didn't waste any time following their comrade, leaving the four of us standing in the orchard looking on at the mud being churned up behind them as they disappeared into the distance.

Three hours later I left the farm, job done, but now running late for my next visits.

The rest of the day's visits passed less energetically: a calf with pneumonia, a few calf castrations, a lame horse with a foot abscess, and then a lambing which turned out to be a caesarean. Since my days as a vet student I had always loved lambing time, and to bring two little lambs into the world and then see them up and suckling Mum, their tails wiggling like crazy, was such a happy sight. Sadly, though, the economics didn't always stack up, and so we were rarely called upon to assist, but this was a good ewe, and the farmer had been keen, so I had done the caesarean and the two healthy lambs justified the decision.

With my large-animal visits completed, I raced back to the surgery to start my small-animal consultations at 4 p.m. It had been a non-stop day, shovelling a sandwich into my mouth as I drove between my visits, and only giving my dog Max a quick few minutes' exercise down a farm track. When he gave me a look of disgust I promised him a walk on the beach after work as I coaxed him back into the car. Arriving back at the surgery, I saw it was 3.45 p.m.: only enough time to clean myself up, grab a cup of tea and my white coat, and then head into my consulting room. I looked over my list of bookings to mentally prepare myself and see if there were any ongoing cases that needed more attention. I was fully booked with consultations running from 4 to 6.30 p.m. Each slot was ten minutes long, so there were fifteen in all. An initial glance told me it was a fairly routine list: half a dozen vaccinations, a lame dog, a couple of vomiting/diarrhoea cases, a cat with a skin irritation ... I scanned the list more closely, to see if there were any clients or animals I recognized. The 5.10 p.m. appointment caught my attention; according to the computer, the client was called Mr Smith and the patient was called 'Armadillo'.

I'd come across some odd animal names in my time. In fact, we used to play a game at vet school, in our final year on rotations, to see if we could identify the animal breed by the name its owner had given it. 'Charlie' was going to be a black Labrador, destined for the orthopaedics department; 'Rocky' would be a boxer coming in to see the cardiologist; and 'Tiny' was obviously a dachshund, off to see the neurologist. 'Armadillo' was a new one for me. I clicked on his client card to bring it up. Was this a dog or a cat, I thought? Looking through the information, it seemed that this was a new client with a new animal, and all it told me was that Mr Smith was bringing Armadillo in to be microchipped.

The first half of my session proceeded uneventfully. As I bid farewell to my 5 p.m. appointment, I couldn't help but notice the client who sat clutching a blue cat box; he had taken up the corner seat, which happened to be in my direct line of sight. He must have been in his mid-fifties, with a mat of white hair and a slightly unkempt bushy beard. He was hunched over the cat box, holding it in a most circumspect manner. I'd seen all sorts of human behaviours within the waiting room – the relaxed,

the nervous, the reluctant, the protective – but there was something slightly different about this gentleman which I couldn't quite put my finger on.

When I looked at my computer screen, my 5.10 p.m. appointment - 'Armadillo Smith' - was highlighted to signal their arrival, and of course Mr Smith turned out to be the gentleman in the corner. Standing up with his precious cargo, I was surprised at how heavy it seemed. My logical assumption was that the cat box contained a cat, so if it was coming in to be microchipped, the chances were it was a kitten, and should therefore weigh less than a kilo. The way he appeared to be struggling with the box, however, suggested it was closer to ten times that weight. Maybe it was a rescue cat that he had adopted? But that didn't compute, because in that case it should have already been chipped. I sketched a scenario in my mind: a morbidly obese cat that was being killed with kindness as the sole companion of an elderly person who had just died. Maybe this was the son who had now taken charge of the cat, and his first duty was to get it chipped. No wonder he was precious about it: the last link to a deceased parent. If my assumption was correct, this might well be more complicated than a simple microchip. I played through the range of health issues that may have inadvertently gone by the board: fleas, worms, skin issues, dental disease, diabetes, arthritis were all possibilities.

I shut the door behind Mr Smith and introduced myself. He placed the cat box carefully on my consulting-room table, then shook my hand with a broad smile.

'Pleasure to meet you.'

I turned my attention to my computer as he started unclipping the lid.

'I bet you don't see many of these!' he said.

His words took several seconds to register. Microchipping a cat was a simple job, whatever other health issues it might have, so I'd allowed my mind to wander. If I got through this consultation quickly, I might just have time to make a cup of tea before my next one. Still focused on my computer screen, I turned to fully engage with my new patient.

It was not an obese cat. The creature before me had a rodent-like face with large pointed ears, a domed body and a long, segmented tail. Covering his body was what looked like a medieval knight's suit of armour, and his head seemed protected by a perfectly fitted moulded helmet. The shock and surprise on my face must have been evident, to judge by the wry smile that appeared on Mr Smith's face, but I tried to cover it up and maintain my professional composure.

'You're right, I certainly don't see many armadillos here. This is definitely a first for me!' I said with an attempted casual air.

'This is a nine-banded armadillo,' he replied. 'They originate in the Americas, but I'm sure a clever chap like yourself knew that.'

This had completely thrown me, and I had to face up to the fact that I didn't really know the first thing about armadillos. With no useful facts up my sleeve, I couldn't even engage in an educated conversation about the creature before me. Worse than that, as I surveyed it, the realization dawned that this mammal was completed covered in about a centimetre of armoured plating. Where on earth was I going to shove a very large needle to implant the microchip? I racked my brain, thinking of how best to handle this.

'So how does someone end up with a pet armadillo in North Devon?' I asked, to buy me some more time.

'I've never seen a Jaguar, Nor yet an Armadill- O dilloing in his armour, And I s'pose I never will,' he recited, before noticing the bemused look on my face and continuing: 'O Best Beloved, no one on the banks of the turbid Amazon has

ever called Stickly-Prickly and Slow-Solid anything except Armadillo.' Clearly my expression didn't change, because he snapped out of his reverie to address me more directly. 'Where's your education, my dear boy? Did you never read Rudyard Kipling's Just So Stories?'

'Gosh, yes!' I replied. 'But a long time ago.'

'So you don't remember "The Beginning of the Armadillos"? It was my favourite story as a child and ever since then I always wanted an armadillo as a pet. It's only taken forty-five years!'

'I see,' I said in acknowledgement, but in truth I was utterly baffled.

I was quickly brought back to reality as he started telling me about how he had come to acquire his pet.

'Do you need a Dangerous Wild Animal licence for . . . it?' I asked, realizing as I spoke that I didn't know if it was male or female.

'No,' he said. 'You only need one for the giant armadillo, *Priodontes maximus*. The banded, fairy and screaming armadillos are thankfully all exempt from a DWA licence.'

I'd never heard of fairy or screaming armadillos before. I was learning so much already, while at the same time I was painfully aware of how completely clueless I was as to how I was going to microchip this creature. I knew I had to take the lead before he asked me about it.

'So . . . we're microchipping it today, is that right?'

'Yes, please,' he said. 'But "it" is actually a "he", and his name is Arnie.'

'Of course it is,' I said sharing his wry smile. 'I'll just pop out and get the things I need, I won't be a moment.'

Before he could enquire any further about the procedure I left the consulting room. All the equipment I needed to microchip a dog or a cat was actually just outside the back of the consulting room in our pharmacy, but that wasn't the main reason for excusing myself. I headed straight through the pharmacy into the prep room, and straight to the computer. I clicked on the browser, brought up the Google homepage and typed, 'How do you microchip an armadillo?' The initial results were unhelpful: something about the Armadillo-43/T Embedded Computer Display Module (which my brothers would probably know about, but was no help to me). I tried a different tack. I typed in 'microchipping exotic animals', but that too proved unsuccessful. I was keenly aware of the limited window of time in which I could reasonably absent myself without raising suspicion. *Think, boy, think!*

Itried again: 'microchipping locations in animals'. Wikipedia came up with 'Microchip implant (animal)', but this just mentioned dogs, cats, horses and birds. I scrolled further down the page. 'Microchip identification guidelines WSAVA' (the World Small Animal Veterinary Association): that looked hopeful. I clicked on the link. Scrolling through the article I found a section titled 'Microchip implantation sites for small (companion) animals'. I thought Mr Smith might be pleased to view Arnie as a 'companion animal', but I didn't think the WSAVA would consider an armadillo in quite those terms. I read on, frantically. 'Recommended implantation sites in other species'. Now that seemed more helpful. Unsurprisingly, there was no mention of armadillos. But the implantation site it specified for 'other mammals' was between the shoulder blades, if the adult length was less than 17 cm from spine to shoulder. Arnie was the right size, all right, but that would mean implanting through his armour plating!

I read on. Agricultural animals, elephants, hyrax, loris, alpacas, amphibians, avians, emus, penguins, vultures, fish, chelonians, crocodilians, snakes, lizards ... and that was where the list ended. It was time for some lateral thinking. Of all the animals on the list, the closest had to be a chelonian –

a turtle, terrapin or tortoise – with a hard shell covering most of its body. I scrolled back up to the 'chelonians' section. '*The left hind limb socket, subcutaneously in small species and intramuscularly in larger species* . . . *then the implantation site is sealed with tissue glue.*' Jackpot! I closed the window on the computer and grabbed some tissue glue from the preproom cupboard, and then with a renewed air of confidence strolled back through the pharmacy, picking up the microchip and microchip reader as I went, before re-entering the consulting room.

'Right, I think I've got all I need. It's quite a simple procedure,' I said, with an assured authority that suggested I knew what I was doing. 'The microchip goes into the muscle of the left thigh. I need you to hold Arnie on the table while I first clean the leg and then insert the chip. After that I'll glue the skin closed to prevent the microchip coming out. Armadillos don't have elastic skin,' I added, 'so there'll be a hole left from the needle insertion if we don't glue it closed.'

'Oh, OK, that does sound pretty simple,' he said, a note of relief in his voice. 'I wasn't sure if he would need an anaesthetic or something.' He picked Arnie out of his box and placed him on the table.

Arnie was fairly cooperative at first, but having a twelvegauge 1.5-inch needle thrust into his upper thigh did not appear to be his idea of a fun day out, so when I tried to expose his limb from beneath the armour plating I soon discovered how immensely powerful his legs were, even with Mr Smith helping to hold him down. It took all my strength and both hands to extend the leg into the position I needed for injecting the microchip, but this of course left me with no hands free to prep, inject or glue the wound. A third pair of hands would be required!

'He's a strong little fella,' I commented, as casually as I could. 'I think I might need some assistance.' I left the room in

search of a nurse, and found Louise, our head nurse, seeing to one of the in-patients.

'Any chance of a hand microchipping an ... animal?' I asked, deliberately omitting to identify the exact species I was referring to. I had to keep the element of surprise – the look on her face would be priceless, I thought.

'Sure,' she said. 'I'll just be a moment, when I've finished with Poppy.'

'Thanks, I'm in the end consulting room.'

It was only a few moments before Louise knocked on the door and came in. Her reaction was better than I could have wished. When she laid eyes on Arnie her whole body immediately convulsed backwards in fear, shock and disbelief. I think she would have yelled out an expletive, but her professionalism converted it into 'Oh goodness, not quite what I was expecting.'

'Louise,' I said, allowing her a moment to regain her composure. 'This is Mr Smith, and this is Arnie, a nine-banded armadillo. The microchip goes in his left thigh, and so I need some help extending his leg out from underneath his armour. He's pretty strong, so can you hold the leg while Mr Smith holds Arnie's body, so I can prep it and then implant the microchip?'

Stepping over to the table, she tentatively reached out to touch Arnie on the back. As her tactile senses adjusted from the fur she was accustomed to handling, to the unusual texture of leathery shell, and her emotions to the lack of any affectionate response from her human-to-animal contact, she relaxed into the situation and her professionalism took over.

The procedure was quickly and effectively performed, and after assuring myself that the skin glue had set, and scanning the left hind thigh to ensure the chip was in place, Mr Smith returned Arnie to the cat box, thanked us both gratefully and headed out of the door.

As the door closed behind him, Louise caught my eye.

'In ten years, that is definitely the weirdest animal I have ever seen in here,' she said. 'Thanks for the warning!'

'I was a bit surprised too,' I admitted. 'I thought it was going to be a cat.'

'I have one question, though. North Devon isn't exactly overrun with armadillos, so if it goes missing, it's not exactly going to be hard to track down, is it? So why go to all the trouble of getting it microchipped?'

Although I knew there were good reasons, I had to admit Louise had a point.

'Anyway,' she continued. 'How did you know to put the microchip into the back left thigh?'

'You call yourself a veterinary nurse and you didn't know that?' I replied with a grin, taking advantage that I'd closed the window on the computer, hiding the evidence of my Google search. 'I thought it was common knowledge.'

Armadillos: fast facts

Dasypus novemcinctus: The nine-banded armadillo

Distribution: North, Central and South America.

Description: Nocturnal mammal. Twenty different species.

Names: The young are called 'pups'; a group of armadillos is called a 'fez'.

Life span: Up to 20 years.

Habitat: Armadillos live in burrows, ideally suited to a warm, rainy environment such as rainforest, but they adapt to scrubland, open prairies or grassland. They have a poor amount of fat so can't cope in cold or dry environments, where they lose heat and water easily.

Diet: Armadillos are insectivores, feeding chiefly on ants, termites and worms, which they lap up with their sticky tongue.

Gestation: 122 days, but implantation is delayed for between 3 and 4 months after mating.

Weight: 85 g at birth, reaching 2.5–6.5 kg as adults.

Growth: They wean at 3 months, are sexually mature at 1 year, and breed annually.

Anatomy: Covering the back, sides, head, tail, and outside surfaces of the legs is an armoured shell composed of bony dermal scutes, covered by non-overlapping, keratinized scales connected by flexible bands of skin.

Body temperature: 30-35 °C.

Interesting fact: If sufficiently frightened, armadillos can jump 4 feet straight in the air. They can also cross rivers by either floating across them by inflating their intestines, or else by diving to the bottom of the river bed, and running across, because they can hold their breath for up to 6 minutes.

Predators: Many, including alligators, raptors and bears, but the cougar is the most common.

Conservation: The nine-banded armadillo is classified by the International Union for Conservation of Nature (IUCN) as being of least concern. Its bigger cousin, the giant armadillo, however, which inhabits the grasslands, forest and wetlands of South America, is classified as vulnerable. On the critical role being discovered about this previously mysterious species, as an ecosystem engineer and advocate of biodiversity through the continual production and abandonment of their burrows, see: www.rzss.org.uk/conservation/our-projects/project-search/field-work/giant-armadillo-conservation-project.