



Mad for things that go croak in the dark

TOAD HAUL: Vincent Carruthers takes frogs seriously Picture: MOELETSI MABE

Vincent Carruthers fell into frogs by accident. More than 40 years on, the amateur scientist has become one of the most respected and awarded in the field of herpetology and conservation, writes **Oliver Roberts**

Rattling frog

W crisis in the early '80s but he did none of the above. Instead, he became the executive director of the Wildlife Society of Southern Africa. In the three years he was in charge, from 1982 to 1985, the society experienced its best years, both financially and as an influence in the environmental sector.

This is just one of the achievements in his extraordinary life. Without any degrees in zoology or biology or natural history, without a PhD in anything, Carruthers — an über-autodidact — has over the past 40 years become an amateur scientist so respected that he's received medals from the Zoological Society of South Africa and North-West University and given honorary life membership to the Mountain Club of South Africa. Recently he was awarded another academic medal, this time a gold medal by the University of the Witwatersrand.

All because of frogs. After developing an accidental interest in them in the '60s (accidental because Carruthers's first love was birds but he couldn't afford a long enough lens for his camera to study them), Carruthers came into contact with Neville Passmore, then a postgrad student at Wits who went on to become professor of zoology at the university. Combining Passmore's professional knowledge with Carruthers's unfettered enthusiasm for seeking out frogs and poking his more suitable lens at them, the two produced *South African Frogs*, a guidebook published by Wits in 1979 that set a world standard and has remained a kind of bible for local frogophiles ever since.

"I had a salary job at the time [as marketing manager] and Neville was working his way up at Wits," said Carruthers. "We each kitted out a Volkswagen kombi so we could sleep in them and every Friday we dived out of the office and drove like hell to go and find some frogs."

The pair's weekend wandering not only resulted in their book, it also led to the unearthing of several new frog species as well as new findings on anatomy, behaviour and habitats. The thing is, Carruthers — who lives in Morningside, Johannesburg, with his wife, Jane, a history professor, and their sheepdog, Wallace — picked just about the best vertebrate to study as an amateur. There simply weren't many people studying frogs at the time because they're notoriously difficult to observe and research. This is still the case. And it's the reason why

new frog species are being found all the time. "We could publish quite readily and journals would accept stuff more easily than if we were studying what everybody else was



Forest tree frog



Tinker reed frog

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African painted reed frog

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"We could publish quite readily and journals would accept stuff more easily than if we were studying what everybody else was

other people have loads of books and information, but 30 or 40 years ago there was practically nothing."

But some will be thinking — frogs? Why? Those icky, slimy things that jump out at you on drizzly summer evenings and keep you awake with their croaking?

"They're very different and very interesting," said Carruthers.

"Once you get into the anatomy of them, unlike any other vertebrate that has evolved, they don't have feathers or hair or any insulation, but they live in situations where insulation is actually imperative. So they have to have fat bodies that are different to most vertebrates.

"And their sensory organs . . . they depend on sound for breeding. Females can only be attracted to a male if he's calling."

In the early days Carruthers used to lurk in various environs at night, recording calls on a reel-to-reel tape recorder, which seemed to weigh a ton.

"Frogs choose their call site very specifically. One species will only call from reeds, another from a sandbank, et cetera. So, theoretically, you can sit in the dark and draw the landscape according to the sound the frogs are making."

During his years of searching for frogs, Carruthers had very few scrapes with danger, but there was that one time he was nearly arrested on suspicion of illegal diamond digging when a policeman caught him and some other frog lovers prancing about in the Namib Desert with torches.

At the police station they stated that they were looking for a rare desert frog that burrows into the sand to get to the moisture that filters down there from the Atlantic Ocean mist. Understandably, the policeman said it was the worst story he'd ever heard.

These days, Carruthers does less frog hunting but is still heavily involved in the field, collaborating with North-West University's Professor Louis du Preez to produce the *Complete Guide to Frogs in Southern Africa*, published in 2009. In his current guise as environmental consultant he continues research into the role of amphibians as indicators of climate change and wetland health.

He was also part of the development of the Frogs of Southern Africa app, which he shows off with great excitement during our interview, playing calls, talking about different types of vocal sacs, and throwing around terms like "very attractive" and "charismatic" to describe species. He hopes the app will get adults interested in frogs again, to go looking for them in their gardens, to hold them and admire them.

"What's extraordinary is that most kids know exactly what a frog is all about," said Carruthers.

"They play with plastic frogs in the bath, then later they collect tadpoles. At the peak of their youthful career they put frogs down people's backs and girlfriends' shirts.

"Then you suddenly dry up and start looking at all sorts of other things and by the time you're an adult, frogs are semi-humorous; nobody takes them seriously and yet of all the animals it's

probably the one that very small children know most about."

