



CHAPTER 16

The Ant Ecosystem



In the South-western Cape, the Smalblaar Myrtle, *Metrosideros angustifolia* grows right on the waterline on most of the Cape streams, with its limbs stretching out over the water.

These small trees are prone to aphid attacks which in turn, attract certain ant species which feed off the honeydew excreted by the aphids and also the aphids themselves.

These trees also offer the perfect habitat for Cocktail ants to build their fascinating nests high above the flood line. Naturally in the Cape Kloofs there are strong winds and breezes, with gusts often knocking ants off the trees onto the water surface."

Marcel Terblanche Fosaf Fly of the Month November 2023 - 'The Sugar Ant Dry Fly'

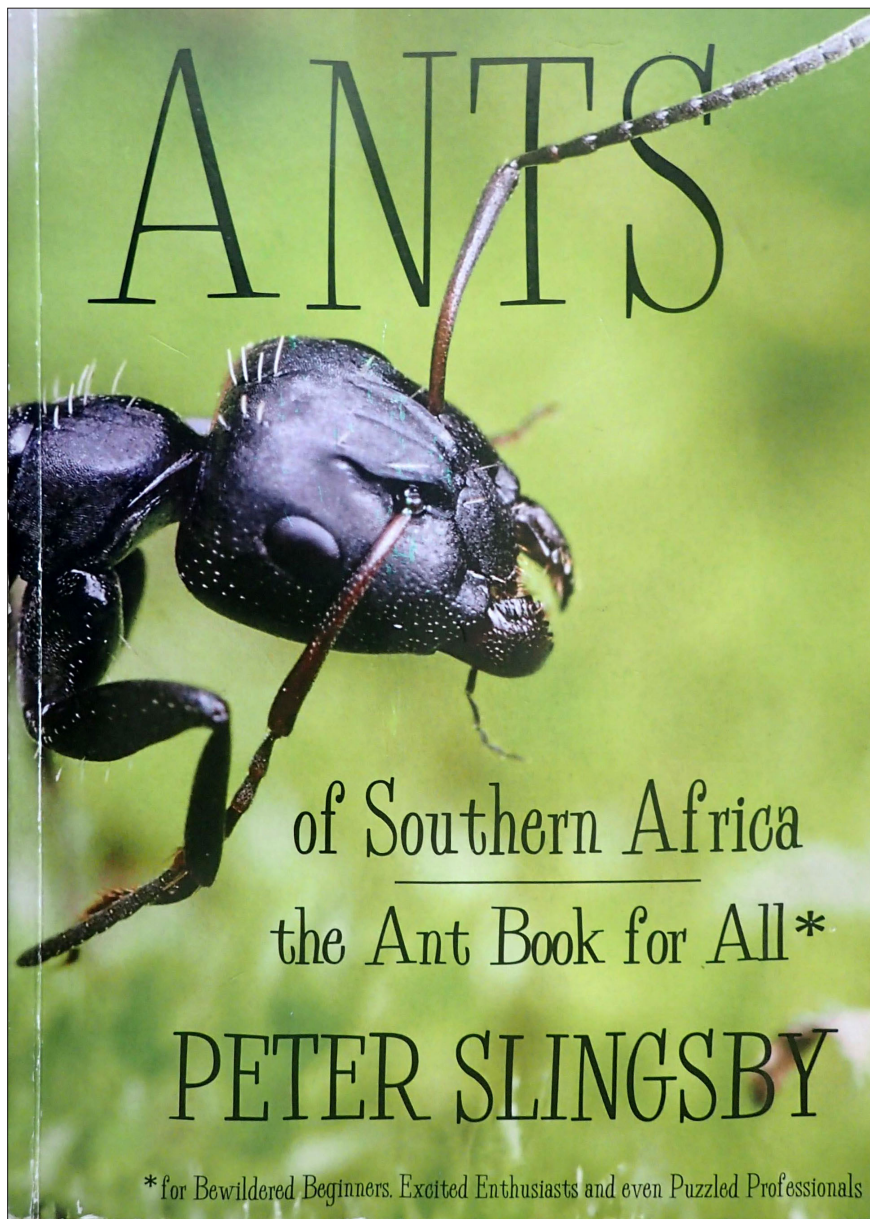
As the painting by artist and professional fly tyer, Marcel Terblanche - @driftflyfisher – headlining the first part of this chapter indicates - the Smalblaar Myrtle plays a vitally important role in the lives of trout in the streams near Cape Town.

At the beginning of spring in the Western Cape, when the mountain air is sweet with the smell of flowers in bud, those flowers literally writhe with movement as the beetles, speckled with pollen, enjoy

the feast. By late autumn that is a thing of the past. Two points are salient here – while more species of beetles exist than any other form of animal life on earth, in sheer numbers they are considerably exceeded by ants and secondly because ants, unlike beetles, live in colonies rather than as individuals, there are concentrations of them numbering from hundreds to thousands. If those colonies are close to water, then the chances of fish in that area becoming familiar with their silhouette and light pattern on the water - rather than that of a beetle - is considerably enhanced.

This is the story of a journey spanning almost half a century as I slowly accumulated knowledge of the role played by three specific ant species which are common in the diet of trout in the streams near Cape Town - *Crematogaster peringueyi*, the Black Cocktail Ant, the *Camponotus* or sugar ant species, known locally as *Balbyters* (*ballbiters*) and the Yellow Fire Ant – *Solenopsis punctaticeps*.

A prized possession in this regard is Peter Slingsby's monumental 2017 book, 'Ants of Southern Africa' – now sadly out of print. His illustrations of ants are magnificent and you can find them on his website, [antsofthecape.blogspot dot com](http://antsofthecape.blogspot.com).



(L) Peter Slingsby's magnificent book on South African ants, rich in research, beautifully illustrated

The most prolific of these three species on local streams is the Cocktail Ant (called Swartwipgatmier in Afrikaans because of its defence mechanism which involves arching its abdomen over its head when threatened and projecting a repellant spray.) For the specific chapter relating to the Black Cocktail Ant on Peter's website and its symbiotic relationship with the Smalblaar Myrtle, use this link:

[- Ants of Southern Africa -: Crematogaster sp: Cocktail ants \(antsofthecape.blogspot.com\)](http://antsofthecape.blogspot.com)

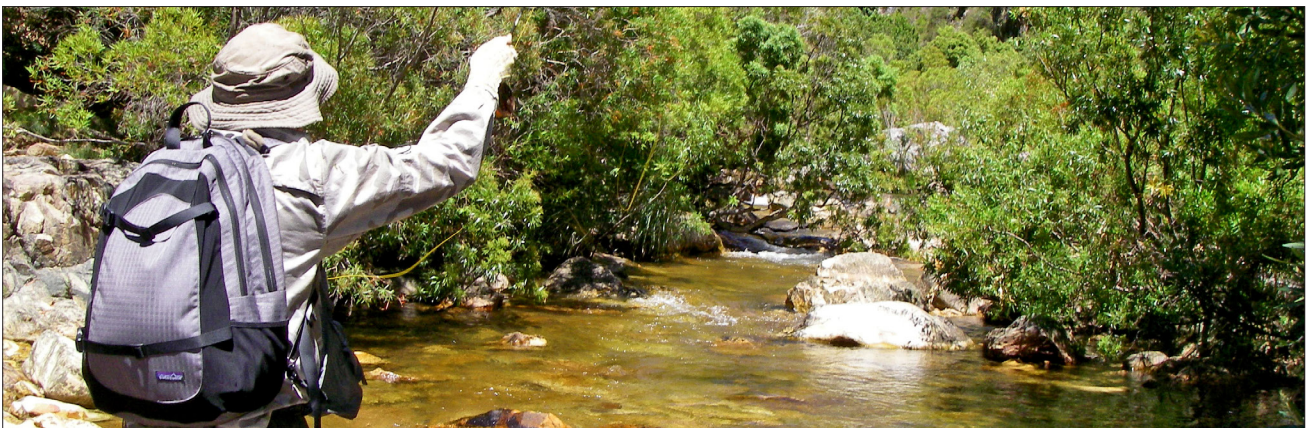
The article has a photograph of the 'carton nests' built by these ants. They are made of chewed vegetable matter which resembles papier mâché. The nests are easy to spot but I never realised their significance in their context as a source of trout food. They also use this material to build protective shelters over their aphid farms.

To get a further idea of what these three ants look like, just do a Google Images search using the Latin names. Peter recommends that you join the Open University's website [iSpot dot org](http://iSpot.org).

[Antwiki dot org](http://Antwiki.org) also has a wealth of information.



Ants on the Smalblaar Myrtle – illustration by Marcel Terblanche



The Smalblaar Myrtle provides trout in the streams near Cape Town with shade and – a regular supply of tiny ants

They all look much the same however, hook size 18 or smaller and mainly dark.

If you do an internet search for *Metrosideros angustifolia* you will be taken to an article by the SA National Botanic Institute (SANBI) on a tree which is known colloquially as the 'Smalblaar Myrtle' – Smalblaar being Afrikaans for 'narrow leaf'.

Our most significant local trout stream is named after it.

This river-dwelling evergreen is the only indigenous myrtle we have and it is endemic to the winter rainfall heathland – known as the Fynbos Biome - of the Western Cape.

What makes the Smalblaar Myrtle important in the context of local fly angling is that not only is it home to prodigious numbers of ants but, in many places, its branches along which the ants search for food, touch the water.

Furthermore, *Metrosideros angustifolia* blooms from October to February, our summer and our windy months when the ants are at a greater risk of being dislodged. The small, clustered, fluffy yellowish flowers are sweetly scented and attract a variety of insects.



The sweet-scented flower of the Smalblaar Myrtle – photo supplied by Alice Notten, Kirstenbosch National Botanical Garden, SANBI

I was told by Storms River artist, Marcel Terblanche, whose paintings illustrate this article, that the cocktail ants exploit the insects visiting these flowers.

What these circumstances make clear is that local stream trout are habituated to the presence of ants in the water to the extent that they respond to them reflexively.

This, when it comes to trout is a matter of record everywhere – trout are ant epicures wherever they are found.

The seminal study on trout diet in African small streams was the two and a half –year, state-sponsored PhD study, Biology of Trout in Kenya Colony, published in 1948 by the late Dr Vern von Someron. You

can find an extract from it on this website in the 'Trout Behaviour and Diet' folder. He analysed the stomach contents of 489 trout taken from 16 mountain streams and found that the most commonly consumed terrestrial insect was the ant followed by beetles.

I was, however, slow to grasp the salience of this initial understanding of the importance of ants to trout and still slower to act on it.

The first lesson came within a year of my starting to fly-fish.

I had been befriended by Tony Biggs, inventor of the RAB Variant and he had been asked by a neighbour to bring some trout home for the smoker.

One of the trout I caught had a tiny ant in the front of its mouth and one almost in its gullet and I realised that each of them had been individually captured in that fast and boisterous water.

Back then, tiny hooks were not available and I thought no more of it.

Then I read Ken Miyata's article 'Anting the Hatch'.

The definitive article on trout's proclivity for ants was written by him and published in *Fly Fisherman* Volume 13, number six (July/October, 1982.) A year later Miyata was dead. He drowned while fishing the Big Horn River in Montana on October 14, 1983. He had a PhD in zoology and was a fellow of the Smithsonian Institute. He co-authored a book 'Tropical Nature' on the natural history of the Central American rain forest that was published posthumously the following year by Charles Scribner. John Randolph, then editor of ***Fly Fisherman*** magazine, headed his obituary 'The Best and the Brightest'. Miyata's peers were some of America's most revered fly-fishing authorities, Art Lee, Mike Lawson, Mike Kimball and others. Had he lived he would have undoubtedly become one of the sport's luminaries. Randolph concluded his obituary by writing: 'Ken Miyata will be missed; his affirmations will endure.' Perhaps it is a fitting epitaph that 'Anting the Hatch' has become part of fly fishing's nomenclature and one of its most effective techniques. Both ants and beetles have been found to shift the focus of trout that seem to be exclusively locked onto a substantial hatch of mayflies or caddis.

The fly photograph which accompanied Miyata's article showed nothing out of the ordinary – just two blobs of dubbed tan-coloured fur with a turn of hackle between them which was clipped away at the bottom of the fly.

With my growing knowledge of the efficacy of ant patterns gleaned from reading books and international magazines, I felt it would be beneficial as editor of *Piscator* to emphasise this. So, for the 2004 issue, I collated quotes from fly angling authorities in an article called 'What the experts say about ants'. It can be found in the 'Ants on the menu' folder on this website.

Setting aside seasonal differences and in a 'match the hatch' context, trout and yellowfish are habituated to ants because there are more of them and, once they land in the water, they cannot escape – more to follow.

References:

Ants on the Menu – this website

Marcel Terblanche – 'Sunken Ants on the Witels' and 'Valuable findings and developments in tying and fishing floating ant patterns' on Tom Sutcliffe's 'Spirit of Fly-Fishing' website.

Fred Steynberg – 'Days that Ants Fly' on his Linecasters website.



