

Tying ant patterns

by Ed Herbst

'Ants are taken in far greater quantities than other terrestrial foods. Next in importance among terrestrial foods are beetles of various kinds." Dr Vern von Someren, *The Biology of Trout in Kenya Colony, 1948.*

While the trout which so ravenously attacked Tim's "off-course, false-cast", ant was clearly not deterred by its absence of legs, I believe that legs and antennae enhance a pattern, albeit incurring the penalty of much longer tying time per fly.

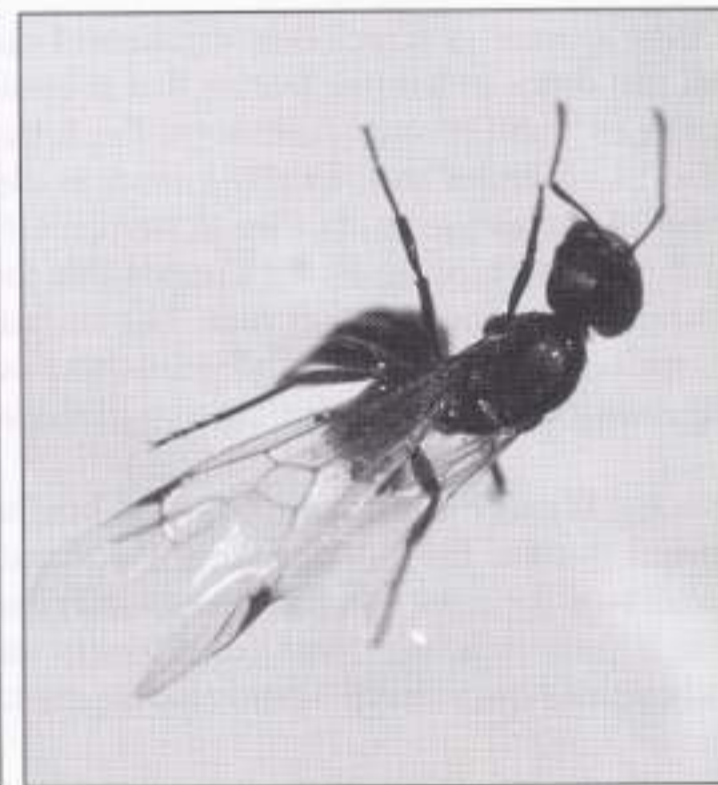
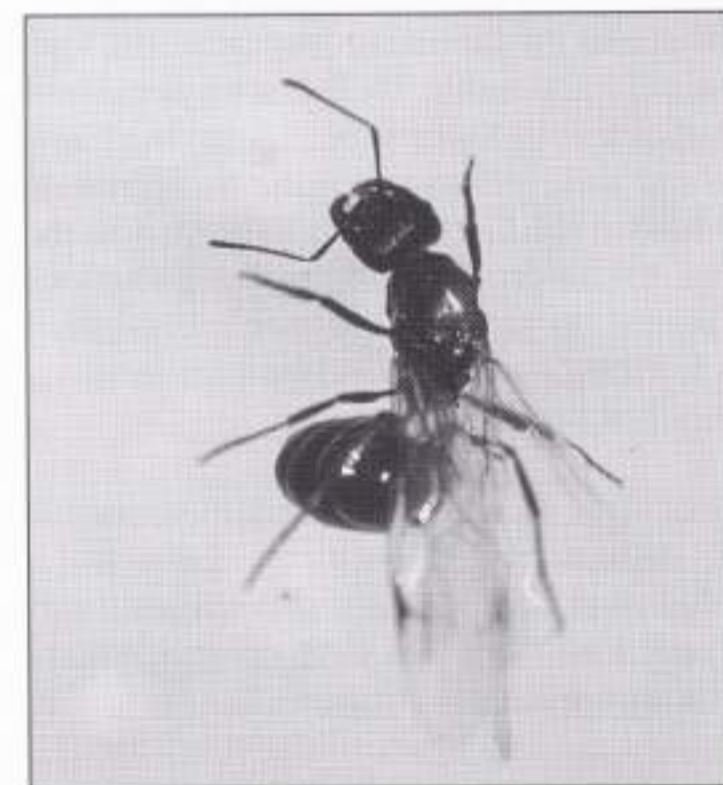
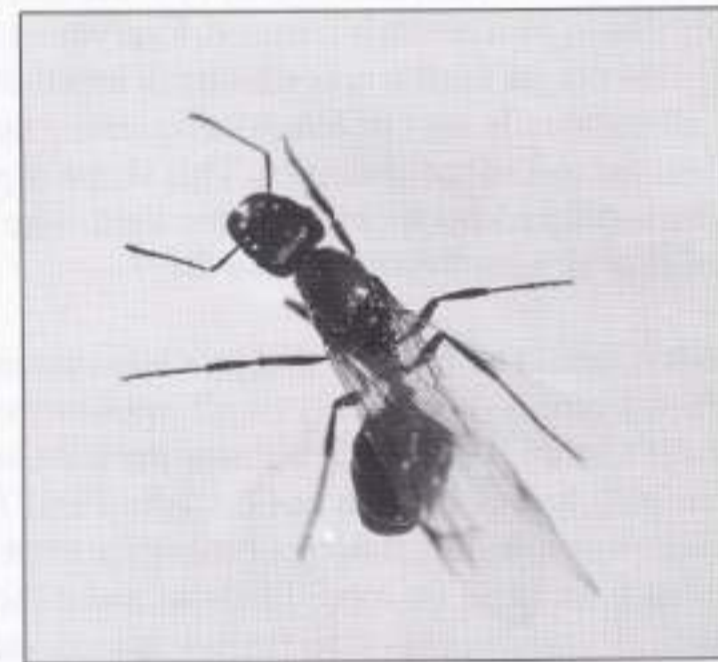
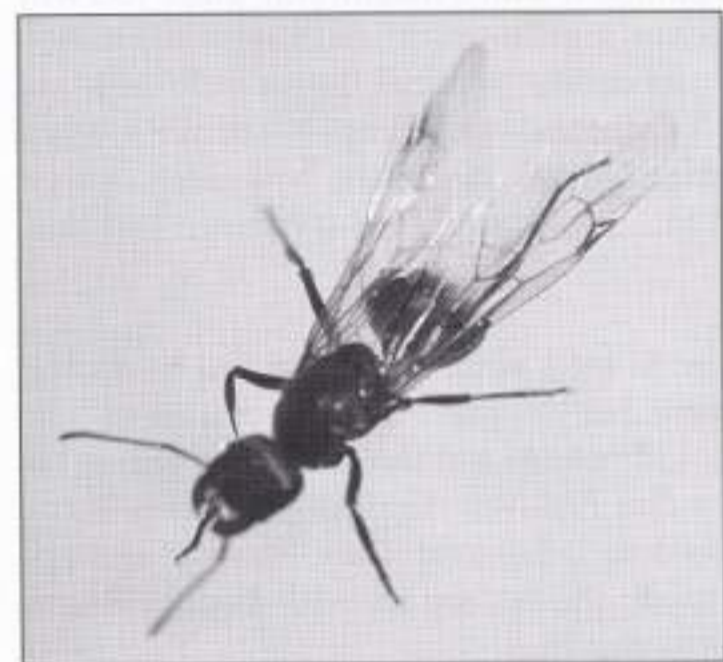
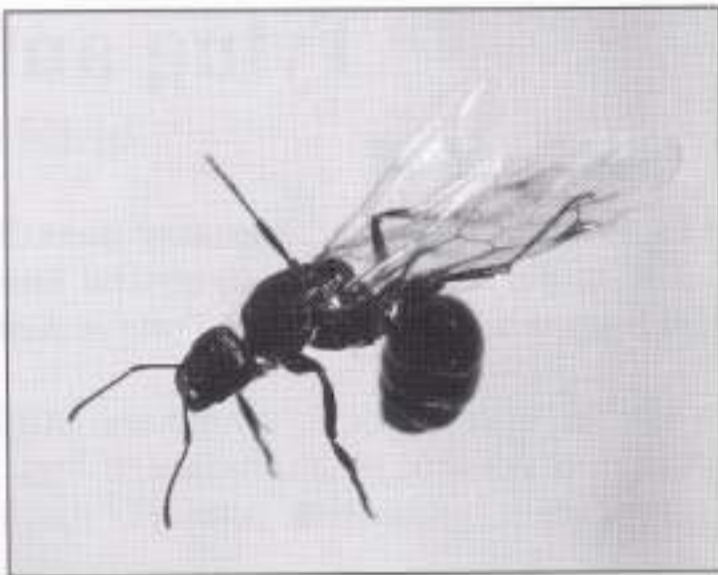
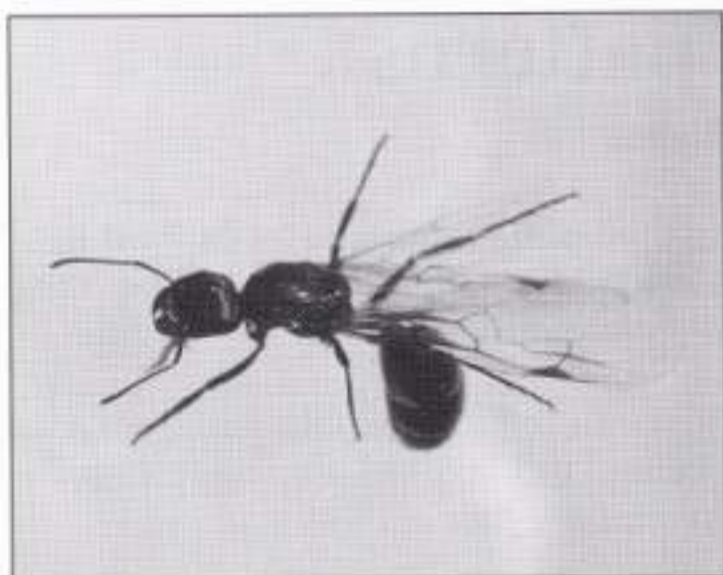
If you throw an ant into a bowl of water and examine it with a magnifying glass you will see that its movement is frenzied. Everything moves, legs, antennae, mandibles and wings. On the bigger female ants which fall into the water during dispersal flights – the ones that will eventually start new nests as queens - the heavier abdomen hangs lower in the water than the rest of the abdomen. This shape is perfectly replicated in the new generation of short-shanked hooks such as the light wire TMC 2488 and the heavy gauge and thus quicker sinking 2499SP-BL or 2457

What should be noted is that ants have antennae as long as their legs and that by adding these features you not only create more movement, but you make the fly much wider. The latter feature is important because the late Gary LaFontaine and those assisting him in his research for books such as *Caddisflies* and *The Dry Fly, New Angles*, spent many hours underwater with aqualungs observing trout feeding behaviour. They found that deep-lying trout were far more likely to make the trip to the surface for wide-bodied insects such as grasshoppers than narrow insects such as mayflies.

Doing an internet search on ant patterns I came across the following passage: "The lone ant that drops in has one feature that is immediately noticeable. Its legs always move. I know as I have probably thrown in five hundred of the Au Sable's (Michigan) big black size 14 carpenter ants, locally known as elephant ants, just to watch the trout feed on them. After seeing the ant's leg movements it's hard to fish Gerald Almy's fur ant with the stiff deer hair legs, besides it's impossible to see it at ten feet. Gerald may have a serious understanding of ants and such, but he has almost no grasp of old men's eyesight. I haven't observed that many flying ants but I would expect leg motion and the corresponding predatory trigger there also." (www.flyangleronline.com).

Nuptial flights by ants often occur on hot, humid days and on the lower Molenaars this means that the fish that are receptive to them are bass. Several years ago I watched a small bass for several minutes as ant after ant floated above it. What was fascinating was that it ignored the ants that floated inertly and only took those that were struggling and I believe such movement would also trigger trout into striking.

Examining a tiny ant that I had placed in a bowl of water under magnification, I was fascinated to see that its legs were speckled black and red/orange. The material I now use for legs/ antennae on smaller ant patterns is fluorofibre and, in the coming season, I am going to use a peach version speckled with a black, felt-tip, permanent marker both to



A sequence of pictures taken over a period of about two minutes of an ant dropped in a bowl of water showing the constant movement not only of the body but of the legs, wings, mandibles and antennae.

simulate this pattern and to create the impression of movement.

A thin strip of cling film, used to wrap food in the fridge, exactly replicates the hyaline wings of ants on dispersal flights but you can also use a combination of midge flash, an ultra-thin krystalflash and threads from "twinkle organza" wedding gown material.

Locally, the Fishient group (www.fishient.com) produces two products Fluoro Fibre that I use for the legs and antennae and a thin, stippled, transparent plastic strip fibre called Gliss n Glow which works well as a wing material on small patterns.

Traditionally ant patterns have consisted of two blobs of dubbing, fore and aft, to represent the head and abdomen and separated by a few turns of hackle to represent the legs. For me, the key to tying far more realistic ant patterns came when I accessed Mike Hogue's excellent website www.mwfltying.com/patterns/ant.html and saw a technique originally devised by John Betts, fly tying's doyen of synthetic material usage. A single strand of leg material is folded between thumb and forefinger to create two loops that are then tied in at the midpoint of the hook shank. The loops are then cut forming three legs on either side. This is how Mike describes it using mono as the leg material: "Cut off about one and a half inches of monofilament. Make an overhand loop with the mono crossing over the top. With your other hand make a loop that crosses over the top back towards the centre. The two sections should touch each other in the middle. This is your legs set that you will tie in at the centre of the fly. So, instead of tying three legs you can now tie in one, using a single strand. You can adjust the lengths by yanking on the tag ends." I found it far easier to bend the leg material into a "U" shape and tie it in at the midpoint of the hook shank with the two ends pointing towards the bend of the hook and the curve of the "U" projecting forward over the hook eye. It then requires less manual dexterity than Betts' method to fold the forward-pointing loop backward and tie it in forming two loops on either side. "X" the thread in between them to secure them in position and then cut the loops to provide six ideally positioned legs – two pointing backwards, two forwards and two to the side.

On bigger flies, #14 and 16, I use brown Unique Hair, a soft, crinkly, translucent nylon designed for use in salt water streamers. It is imported by Mike Peterson of Hairy Fairy Flies, the local agent for US company, Hareline Dubbin. On smaller patterns I use Fluoro Fibre produced by the Fishient Group.

My normal ant pattern combines a tiny glass bead at the head with a dubbed abdomen and the smallest beads available locally are imported from Czechoslovakia and sold at The Bead People, Durbanville (021 9794751).

If the water I am fishing is very shallow and very clear I will use a dubbed head rather than the bead, particularly on patterns smaller than # 18. I use specialised materials such as Orvis Mighty Fine Dubbing but there is something better which I have yet to try, Kreinik silk dubbing. Kreinik is an USA-based company that produces materials for the embroidery and haberdashery market but they have found that their materials are increasingly being used by fly tyers. (Their braided 1/8 of an inch ribbon produces superb shellbacks for sunken beetles). I first came across Kreinik materials at Orion Wool and Crafts, recently re-located from the CBD to 12 Woodburn Crescent, Gardens (021

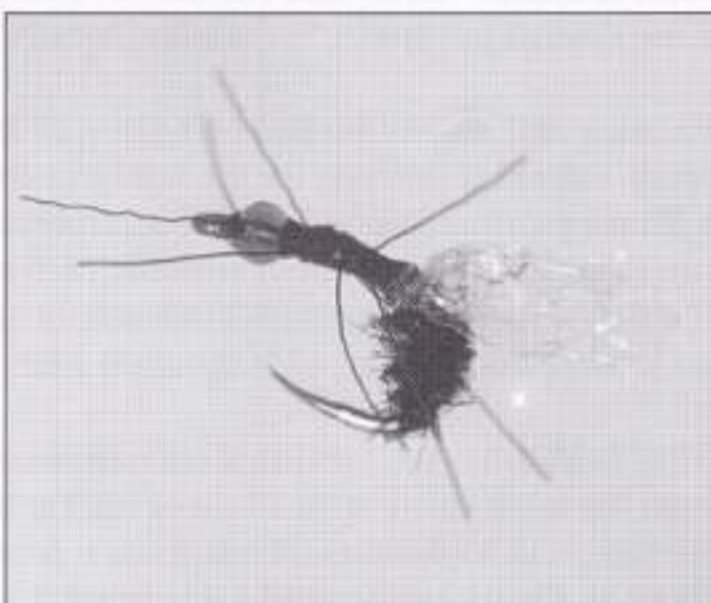
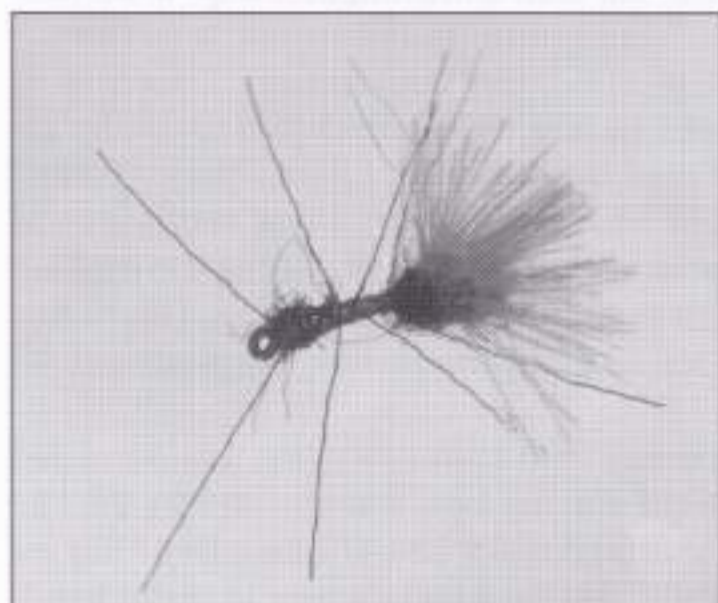
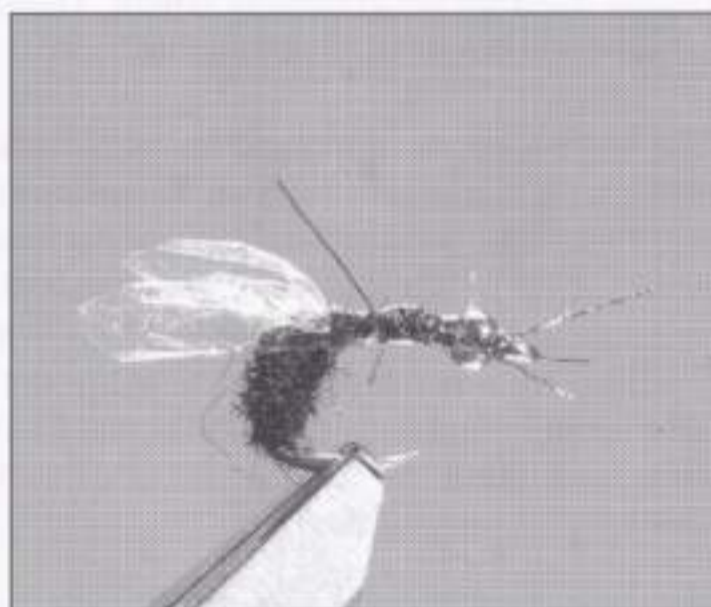
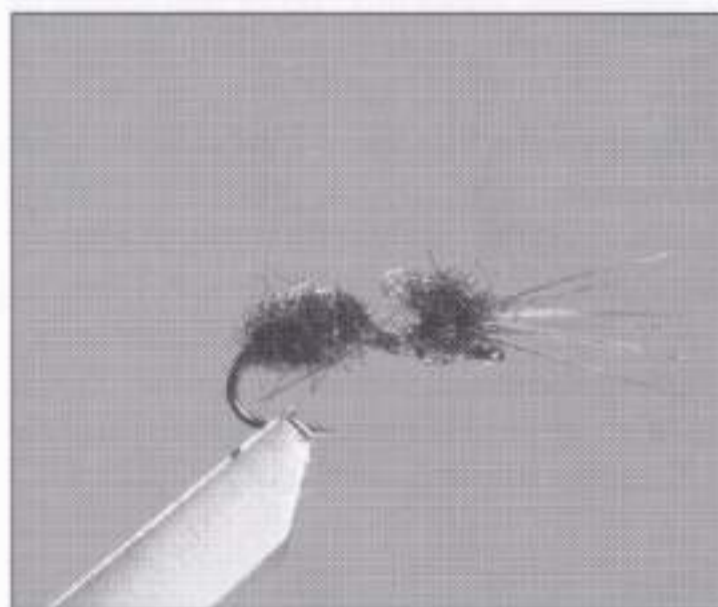
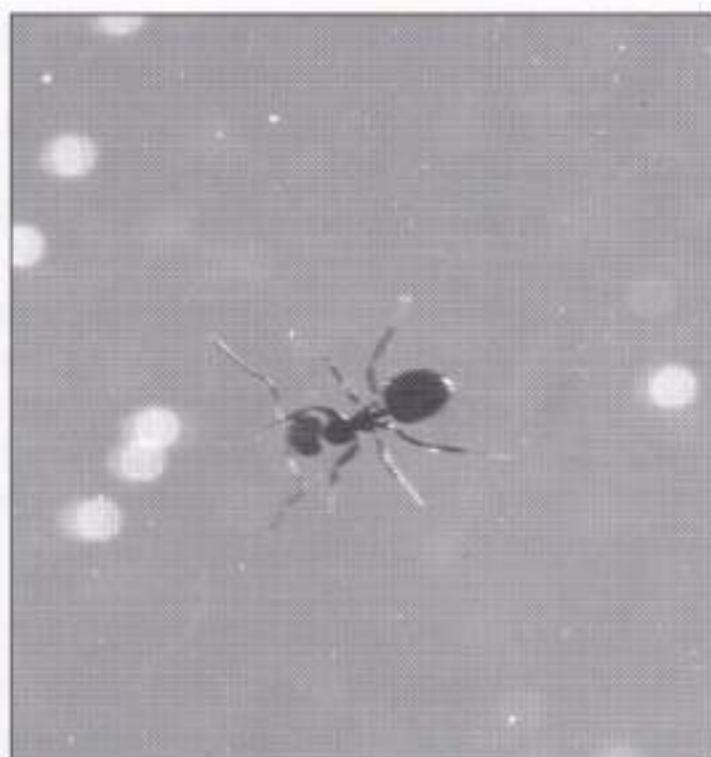
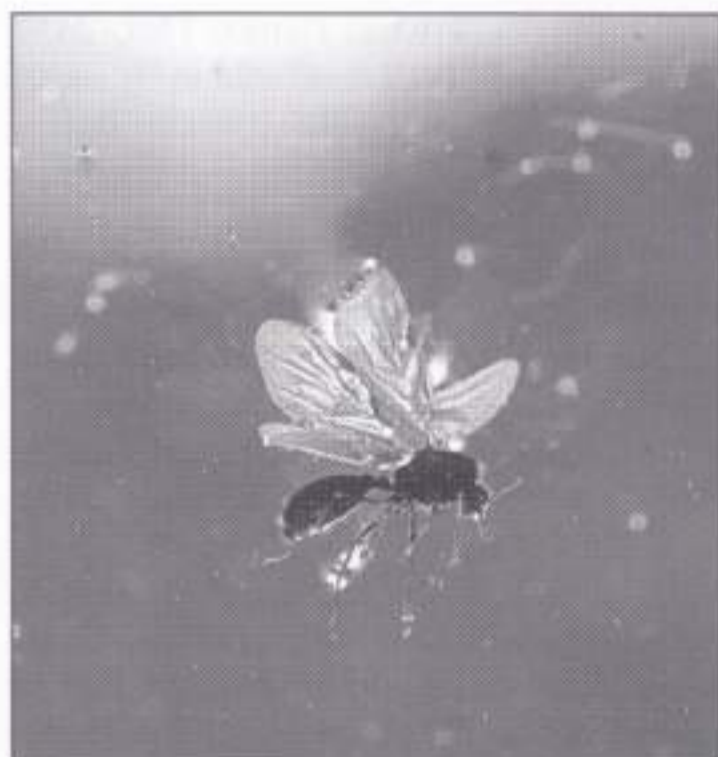
4239782). However, for the silk dubbing you will probably have to order from their website, www.kreinik.com which has a fly tying section. Authors Harrison Steeves and Ed Koch praise it highly in their book, *Terrestrials*, (Stackpole Books, 1994, ISBN 0-8117-0629-X), a copy of which is in the CPS library: "This new material is a silk fibre dubbing produced by the Kreinik Manufacturing Company of Parkersburg, West Virginia, and we are confident that it will cause quite a stir in the fly fishing fraternity. It is made of unbelievably fine, highly flexible silk fibres and has a lustrous sheen unlike that of any other dubbing. Those of us who have tried it have been amazed at its properties and have been spoilt rotten! We routinely employ it to tie everything from size 16 to size 28 flies of all sorts. For ant patterns it allows us to tie even the smallest sizes with relative ease. Size 28 ants can be perfectly tied with the two humps and constricted waist so characteristic of this group of insects."

This "sheen" is important because ant bodies are covered with tiny, light reflecting, air-bubble attracting hairs.

On the smallest ant patterns, I like the Gamakatsu S13S-M fine wire, midge hook imported by Stealth Fly Rod and Reel in Johannesburg (011 782-2332). The finest thread available for micro-patterns is Jan Siman Hyperfine. This Czechoslovakian product consists of two hair-tin threads in parallel and used to be imported by Paul Gregg of Durban. Hopefully a new source can be found. Other more conventional possibilities are UNI-Thread Trico 17/0, Gordon Griffiths 14/0 and Benecchi 12/0. On conventional hooks such as the Gamakatsu – as opposed to short shank, wide-gape hooks such as the Tiemco TMC 2488, 2499SP-BL or 2457 - it is important to avoid obstructing the already small gap between the hook shank and the hook point with dubbing to the extent that successful hook-ups are nullified. There are two ways of doing this. The first is to use the technique Gary Borger uses on his para-ant. He dubs the thread and then, instead of winding it around the hook shank in the conventional manner, he holds the thread vertically above the hooks and pushes it down to form a blob on top of the hook shank. A few winds of thread around the base of this ball of dubbing, defines the abdomen and head. I modify this technique on conventional hooks by winding a few turns of dubbing over this ball, thereby concentrating the majority of dubbing above the hook shank and avoiding any unnecessary obstruction of the hook gape.

The second method is to tie the ant back to front with the smaller ball of dubbing representing the head of the ant at the hook bend and the larger ball representing the abdomen at the hook eye – thus avoiding any reduction in the hooking efficiency of the pattern. If you first tie in two microfibrets, representing the antennae, at the hook bend, you improve the buoyancy of the fly and add to its realism.

An easy-to-tie imitation, especially on small hooks, is the spent ant featured in *Chauncey Lively's Fly Box*, a copy of which is in our library. Lively eschewed legs on this pattern and constructed a spent wing of blue dun hackle fibres. He did not wind the feather round the hook and clip the radially spread fibres top and bottom as is the normal practice but stripped the fibres and mixed them butt to tail and tail to butt before tying them in on top of and in the middle of the hook and cutting them to length. He then dubbed the abdomen and head.



Clockwise from top left: A trout's eye view of a female and male ant photographed using the slant tank designed by Neil Hodges (Piscator no 135, p22), two shots of the editor's bead head ant with clingfilm wings and fluorofibre legs; a bird's eye view of Tim Rolston's CDC ant (with added fluorofibre legs and antennae) in the water and Gary Borger's Para-Ant with the dubbing placed on top of the hook shank so as not to occlude the hook gape.

If the water is deeper and the current stronger, use the heavy-wire Tiemco TMC 2457 hook, replace the glass bead with a 1.5 mm copper or black metal bead sold in fly shops under the name "Cyclops Eye" and use "Quick Descent" dubbing which is made of easy-to-dub aluminium fibres. The latter two products are part of the Hareline Dubbin range imported by Mike Peterson of Hairy Fairy Flies in Grahamstown.

For fast-sinking ants, use the light wire Tiemco 206 BL sedge hooks. If you weight the shank of a sedge hook it turns upside down and rides hook point up. By using a metal bead at the eye, and light lead wire overlaid with copper wire on the bend, an outstanding wet ant is created that particularly lends itself to New Zealand-style tandem rigs. A smaller, more buoyant patterns can be tied to the bend of the hook so as to bob enticingly above the weighted fly beneath.

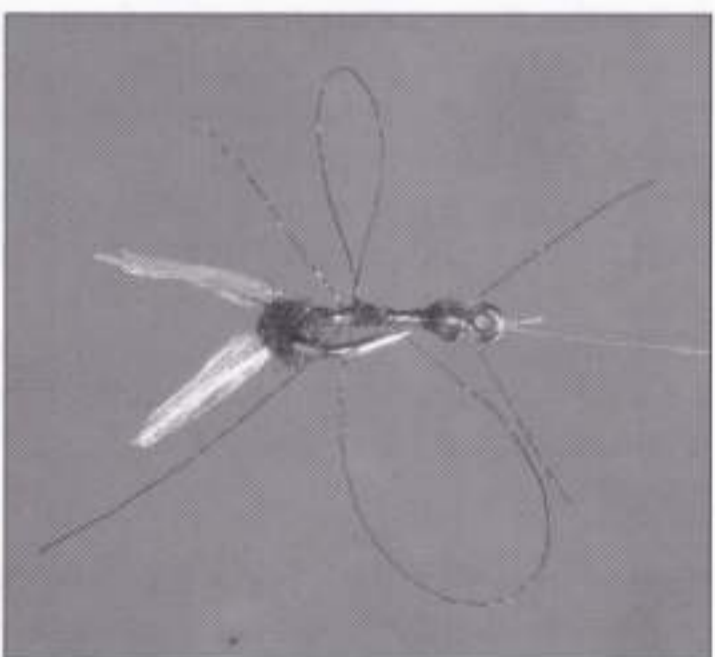
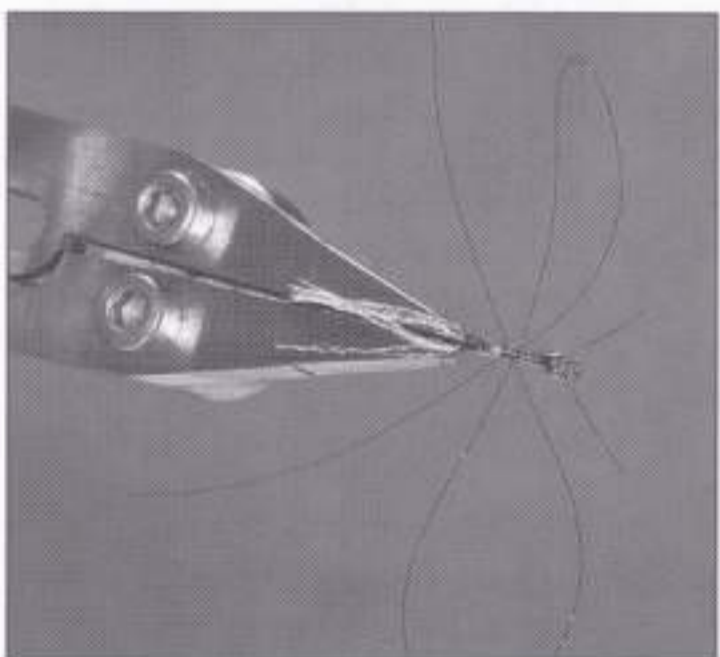
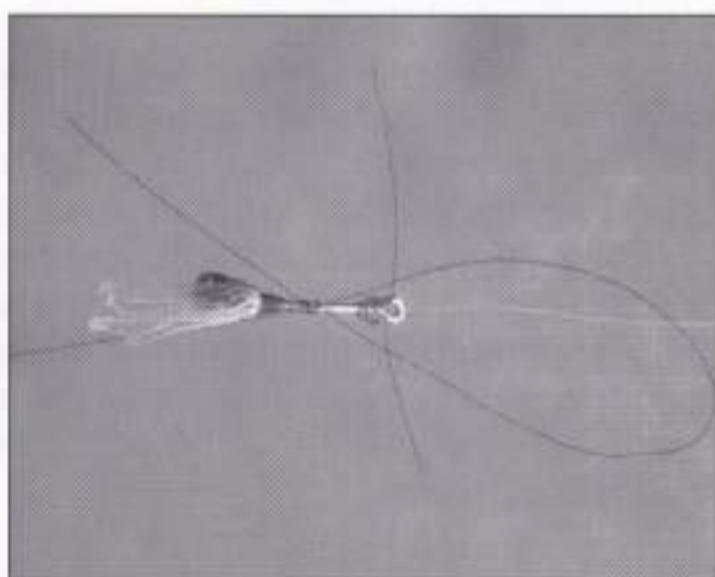
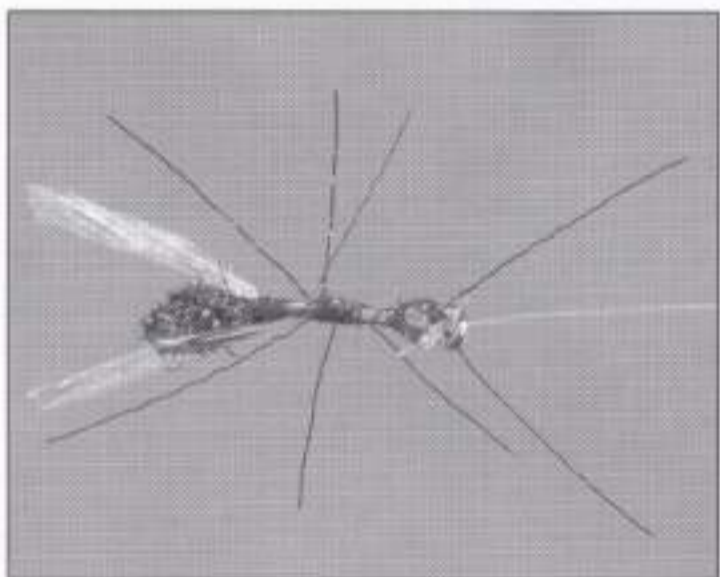
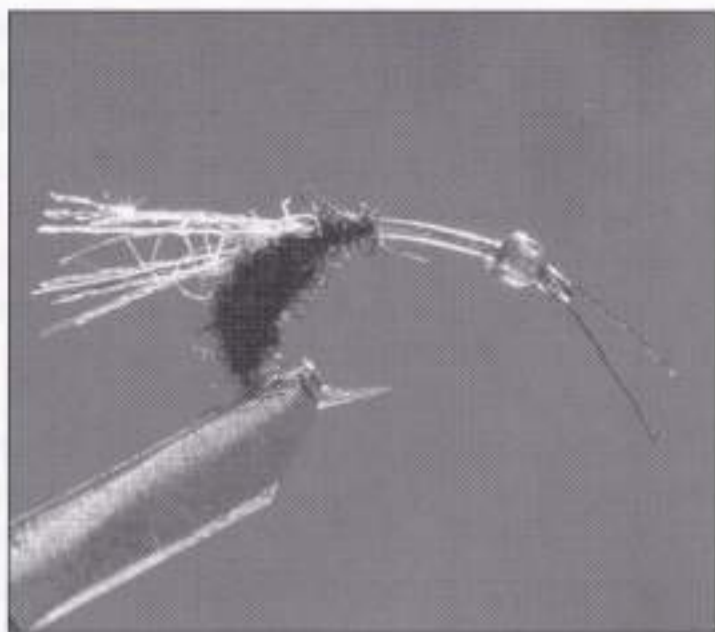
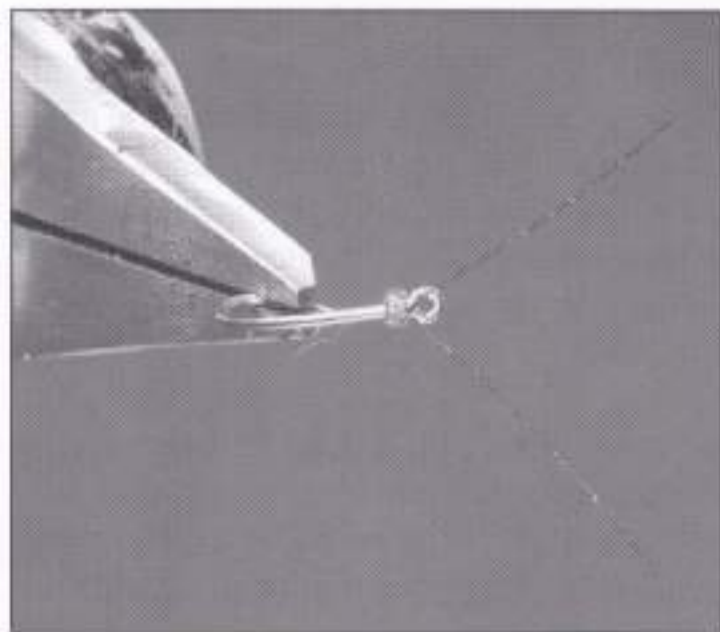
Two intriguing comments in two separate books alerted me to the attraction of orange abdomens on ants combined with heads of a differing colour. The first was in Gerald Almy's, *Tying and Fishing Terrestrials*, (Stackpole Books, 1978) "Ants dressed with hot-orange dyed fur are extremely potent. There is something about this colour that seems to excite trout and urge them to strike."

The second was on a website and was written by Harrison Steeves, the co-author of the subsequent significant book on the subject (*Terrestrials. A Modern Approach to Fishing and Tying with Synthetic and Natural Materials*: Harrison Steeves and Ed Koch, Stackpole Books, 1994): "The colour of the terrestrial can make a tremendous difference. I love to fish ants, and have fished many ant patterns over the years, primarily black. But lately I've gone to other colours, particularly the brighter fluorescent ones. For some reason trout seem to find these irresistible, and I'm now fishing almost exclusively with brightly coloured ants in sizes 16 through 22-and having amazing success!" (www.flyfishamerica.com).

This is not too far fetched because a "two-tone" ant with a fawn/light orange abdomen, *Camponotus fulvopilos*, is common locally.

Floating ants should be tied on light wire hooks such as the Gamakatsu S10-2S dry fly hook. Instead of dubbing for the head and abdomen, use ultra-thin, 1.5 mm "Razor Foam" a Wapsi product imported by Chad Hubbard of Blue Water Flies. I was very happy to discover that a new form of ethafoam – the translucent white foam used in the packing industry – is available which laminates the foam to ultra-fine plastic sheeting. This makes it far more durable and adds flotation when used as a wing on floating ant patterns.

The McMurray Ant, two pieces of balsawood strung onto a piece of nylon mono and tied onto the hook shank with a turn of hackle to represent the legs, was patented by the late Ed Sutryn in McMurray, Pennsylvania. American author, Art Lee, (*Fishing Dry Flies for Trout in Rivers and Streams*) described it as "the deadliest pattern ever to shake hands with a leader". It is far easier to replace the balsa with segments of foam obtained by using a leather punch. Inexpensive punches can be obtained from most hardware stores but the ultimate is the solid steel PRO rotary punch made by the Ivan Leathercraft Company of Taiwan and sold by Woodheads (021 461-7185 and 031 709-3408). To punch out really tiny tubes of foam they have a "Stamping Tool" code 27-700 that costs R45.



Clockwise from top left: 1) Tie an overhand knot in the fluorofibre antennae material, slip it over the hook eye and place a drop of superglue behind the eye. Slip the bead forward, pushing the antennae into position and locking the bead in place. 2) Tie body/wing. 3) Tie a single strand of fluorofibre into a loop facing forward over the hook eye. 4/5) Fold loop backwards to tie-in point and lock in position with thread/superglue. 6) Cut loops and resulting legs to size. Use bodkin tip to transfer tiny amounts of superglue from the brush of Loctite Quick Tite bottle to fly throughout tying process.

In the coming year I am going to experiment with a glass bead McMurray Ant using beads strung onto nylon with a conventional bead representing the head and a tubular bead known as a 'bugle' representing the larger abdomen. In this regard I am once again indebted to Neil Hodges. He has built for me a rotary dryer using a small electric motor from a stove rotisserie. To this he has attached a circular piece of wood with magnetic strips on its perimeter. They will hold the small metal clamps that grip the nylon on which the beads are strung. I will probably use five-minute epoxy to protect the beads and strengthen their attachment to the nylon.

I believe the reason why trout find ants almost irresistible is a Pavlovian linkage between a very distinct search image and the powerful chemicals that ants contain and that trout can discern. Unlike a beetle, for example, which is just a blob, often without distinct legs or antennae, an ant has an abdomen more than four times bigger than its head, a thin waist connecting the two, six long legs and equally long antennae.

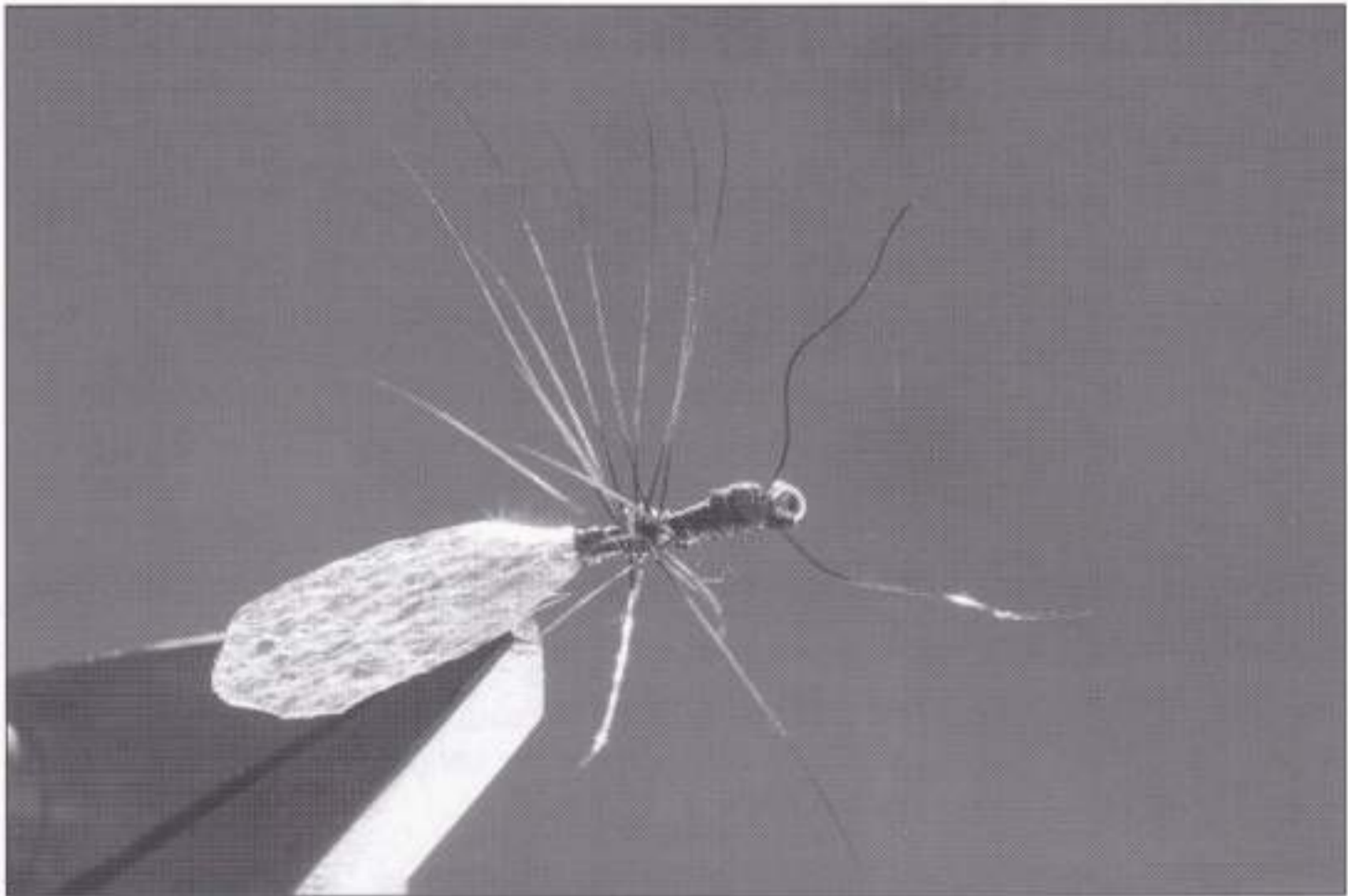
Research in the past few decades has shown however that ants, unlike caterpillars, dragonflies et al, communicate through a complex mix of extremely potent chemicals. Lacking both voice or hearing, they use these chemicals in a variety of ways; to create trails for others to follow, to recruit others when there is a need to attack and subdue prey, to raise the alarm when an attack from another colony is imminent and to threaten the attackers etc. No less than five glands produce these pheromones. Starting from the head there is a mandibular gland that exudes alarm odours as does the Dufour's gland in the abdomen. Also in the abdomen are a poison gland that produces formic acid and other venoms, a sternal gland that summons workers from nearby and a rectal gland that secretes trail-marking odours.

These chemicals are extremely potent as research at Cornell University has found – so potent that the possibility of using them as a cure for Alzheimer's Disease is now being researched: "Gas chromatographic and mass spectrometric analyses in the Cornell laboratory identified four components in the multipurpose fluid from the ants' poison glands. They are N-isopentyl-2-phenylethylamine, a key compound never before identified from nature; anabaseine (3,4,5,6-tetrahydro-2,3'-bipyridine); anabasine [3-(2-piperidinyl)pyridine]; and a fourth chemical never before found in ants, 2,3'-bipyridyl."

Ants can detect just a few parts of their pheromone in a billion parts of air but such sensitivity is not unique in nature. Salmon and trout can detect similarly minute levels of chemicals in the water and this is shown by the ability of salmon and sea run trout to return to their natal rivers.

Furthermore, fly fishers in the USA and New Zealand have repeatedly proved to their own satisfaction that if an angler enters the water well upstream and out of sight or sound of an observed trout, that trout will stop feeding and seek cover and they believe that this is because the fish has picked up the smell or taste of the intruder.

This is not far fetched. Consider also the fact that salmon using fish ladders will retreat if a man puts his hand into the water upstream of them but will not react when a woman does so and this has been attributed to a pheromone difference. Ask yourself, as well, how fish that are blind and live in rivers flowing through caves locate their prey?



A #14 ant with body of razor foam, antennae made from Unique Hair – a material used in salt water streamers – hackle fibre legs and a wing from the new generation of ethafoam bonded to plastic sheeting.

(I know that eels have an excellent sense of smell/taste – about twenty years ago on the Holsloot I spotted an eel about thirty metres down stream and swimming quickly towards Tony Biggs and I. The reason was obvious, Tony was on a midstream rock gutting a few trout he had kept for an elderly neighbour.)

I fish all my ant patterns with a small black poly yarn strike indicator – made from material sold as glo bug yarn – soaked in fly floatant and allowed to dry. I connect my main leader which ends at 5x to the 6x tippet section with a loop-to-loop connection and slide the poly yarn between the two loops before tightening them. Throughout the day I grease the line tip with line floatant all the way down to the indicator and a few centimetres beyond. The indicator then floats not only because it is lighter than water and water repellent but because it is supported by the floating nylon on either side of it. Black indicators are easy to see because they contrast strongly with the water surface and the white bubbles in the current line which is the conveyor belt bringing the food to the fish in its holding lie. In low light, orange or yellow poly indicators or strike putty made by Loon and Orvis and moulded to leader knots work well – although the latter land with greater impact than poly strike indicators.

“After the ant, the beetle is my second choice of terrestrials on small streams.” Charles Meck, Fishing Small Streams with a Fly Rod, 1991.

