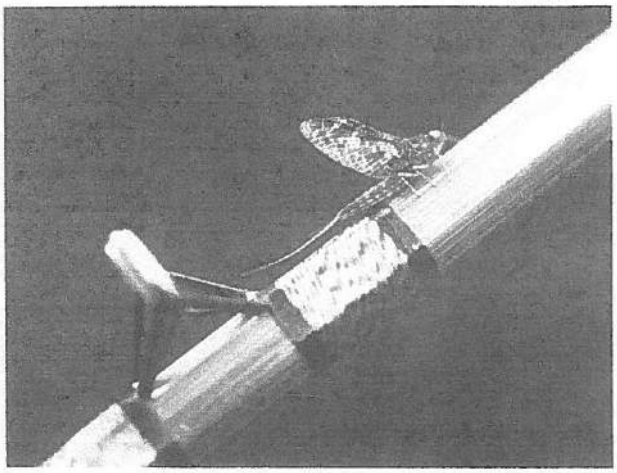
Getting into Insects

Why the study of bugs will help any fly fisher catch more trout.

BY CHIP O'BRIEN

ONCE CONSIDERED A Province of the Eccentric, the study of insects slowly enters the domain of common fisher-folk like me. While many of us amateur entomologists don't give a rat's *gluteus maximus* about Latin, we do want to reduce the hit-or-mystery of catching fish.



At least that was my motive: my early study of bugs developed from days when I would throw every fly in the box at feeding fish - *knowing* I hadn't a clue to their prey - and receive for my efforts only "the fin."

I looked to the masters for solutions and salve for my ego, devouring works by Gary LaFontaine and Ernest Schwiebert. As much as they taught me, I still seemed always a step behind what was happening streamside, just outside the ring of the rise. Let me suggest that I was so frustrated that I eventually approached what seemed the dry subject of aquatic insects. I reasoned that an understanding of these small lives in the right hands - mine - might influence fishing fortune.

Today I can only marvel at how much torn hair and tooth enamel I could have saved, had I reasoned so well, so long ago.

Consider the obvious: selective trout are looking for an entree with a specific appearance behaving in a particular way While a fisher need not devote fisherself to the issue of "who leads?" during the copulation dance of *Paraleptophlebia* mayflies, unless he is Andy Burk, a fisher who recognizes the ritual and players will connect with more fish.

It's a process of distillation, deduction; a certain deviousness helps; and the more you learn about streamborn insects the better. Begin by keeping in mind a Sherlockian axiom: "Eliminate the impossible, and whatever remains, however improbable, must be the truth." *A la* Doyle, if you can discover what fish are *not* taking, you're halfway there.

"Dead drift...dead drift..." was the mantra I'd been chanting for hours. I knew enough to identify bugs swarming through the twilight, flitting amidst bushes, as caddis flies. That tidbit of information had not produced fish *numero uno*, and so I wondered: "If fishing is so relaxing, why does the back of my neck feel like concrete?"

Finally, I threw a "last" cast, even as my mind was planning the rest of the evening. This time I neglected to mend the little Elk Hair, watching with only marginal interest as the bellying line swept my fly beneath the surface. It's obvious what happened next - I landed that fish and several more before darkness forced me from the stream. By then my neck was no longer the pressing issue. Instead: after all I'd heard about "dead drift," what was the trick to this swinging-sunken-dry fly routine I'd stumbled upon?

That question haunted me enough to seek information. First, the incidental - *Brachycentrus*, I discovered, was the Latin name for my caddis; then the significant - *mature females of some species* dive *under water to lay their eggs*.

Light on. For the first time I saw a direct relationship between learning about bugs and catching fish. Now I skate dry flies often, whenever I suspect caddis are laying their eggs.

FORTUNATELY, MANY BUGS have been given popular names by anglers that are a whole easier to swallow than their Latin counterparts. "Blue Wing Olive" and "Pale Morning Dun" are not only useful descriptions of their object's coloration, but phrases as graceful and pleasing as the insects themselves.

Of course, local monikers can also confuse: what California fisher would recognize a "Speckle-Wing Dun" as *Callibaetis*, or a "Tiny White-Winged Quill" as a Trico? Given that some bugs are better known by their Latin names, a smattering of taxonomy is probably inevitable.

If, however, you chance upon a boob who uses Latin to make himself seem wise, creating clouds where clarity rules, you might remind him or her that nomenclature is not the name of the fly-fishing game. Or you might simply inquire after the exact classification of Patzke's Great Balls O' Fire.

(By the way, don't worry about mispronouncing Latin names. Over the years I've become acquainted with several

highly-placed professional entomologists, and *they* disagree. Take the tiny black and white *Tricorythodes* mayfly: one guy says "tree-cory-tho-des"; the other *insists* it's properly "tri-co-rith-o-dez." Who's right? Who cares? "Trico" works for most anglers.)

The first step toward insect literacy usually comes early in the building of a fly fisher: noticing the similarity between flies recommended by local fly shops and those that crawl onto your glasses while you fish. If angling is good - fish falling for the mimic - it makes sense to remember the connection between the fly pattern and the bug encountered.

The next course in many educations is to note the cyclical nature of hatches. When you fish a certain lake or stream for several years, you eventually realize that certain insects species come and go during particular seasons. For example: if in July you notice Pale Morning Dun mayflies *(Infrequens)* on Fall River, it's a bet worth taking that PMDs will hatch again there next July - and that the flies you succeeded with this year will work the next. Because insects have reliable cycles, we can predict with reasonable certainty what flies will catch fish at which times of the year.

FIRST, THE RELATION of pattern to fly, then *when* to expect *what* - now's the time for a field trip to your local fly shop or public library, there to inspect the rich literature of our sport. A number of vaunted authors have produced outstanding books on insects written in angler's language. If the very wealth of information you encounter gives you pause, do what I did: scan the indexes.

Which is tantamount to picking up Cliff's Notes instead of reading Shakespeare off the page. Never mind this heresy - look for the names of fisheries you are familiar with, or for places you would some day like to fish. In my case I was pleasantly surprised to find that several famous writers had researched the insects of venues I angle often. In yours, you may discover that - Presto! - you're instantly advised of bugs you might find - and someone else did the real work.

THE MORE YOU LEARN about insects, the better you understand their relationship to fly fishing - and the likelier it becomes that you'll want to take samples. You may even decide to keep a few: it's great to have the real thing beside your vice while tying imitations, especially if you're inventing a pattern.

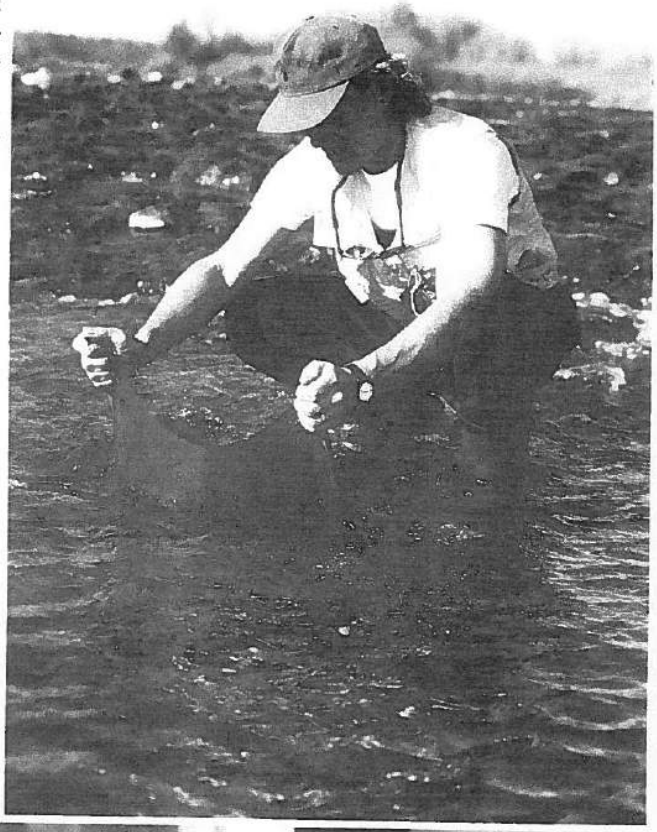
Words of warning, however: the State of California requires that you purchase and display a fishing license to collect aquatic invertebrates; and you must check angling regulations to make certain it's legal in a given fishery. If you find no specific regulation forbidding collecting, you can assume it's okay. The good news here is that wherever collecting is allowed, it's allowed all year.

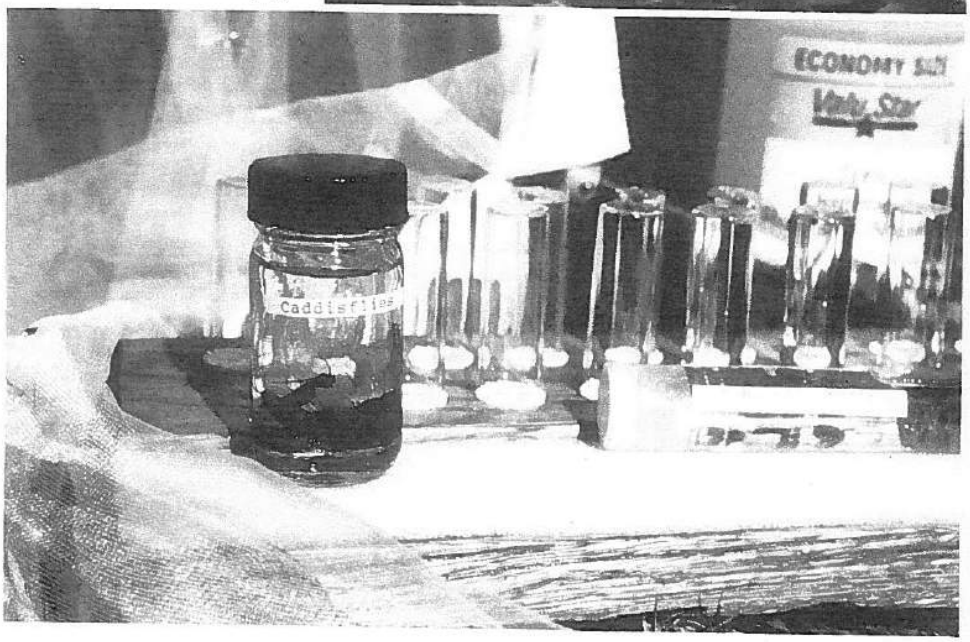
You won't have to apply for grants to get into bug collecting. In fact, compared to the cost of decent fishing equipment, bug-catching gear is the bargain of the century.

To capture flying insects, all you need is a dime-store variety butterfly net, available for a couple of bucks at your neighborhood hobby shop or discount store.

It's awkward - and even a tad odd-looking - to carry a butterfly net while fishing; you're better off leaving it on the bank if you plan to wade. Trying to collect bugs and fish at the same time is asking for grief.

Continued on page 42





Upper right: A seine made of (for example) window screen material is an excellent tool for collecting aquatic insects.

Right: Preserve your insects in glass vials for reference when fly-tying.

Bugs

Continued from page 35

If you've ever tried to skim floating insects (especially tiny ones) off the water with your hands, you know it's not easy. Invariably the current will whisk the bug to one side or another - like grasping for a six-legged greased pig. Better to carry a small aquarium net in your vest: problem solved.

COLLECTING UNDERWATER insects is simple too, though it involves either buying or constructing a seine to filter bugs from the water. A functional seine can easily be made from several square feet of screen (like on a screen door) attached to a pair of upright dowels. Again, a couple of bucks at any hardware store and you're in business. To use, face downstream with the seine below you. Stretch the screen out and stick the ends of the dowels into the stream bottom. Kick up the gravel and rocks with your boots so that current carries debris into the screen. Then lift carefully, tilting the seine toward horizontal. Inspect. Along with flotsam, the screen will trap numerous bugs for collection and study.

Seth Norman, our own Master of Meander, markets both a display for preserved insects and a most-ingenious portable seine that breaks down to fit into a fishing vest. Ask for them at local fly shops.

Film cannisters make handy receptacles for storing captured insects until they can be preserved later. I keep several in my vest at all times. Do be sure to remove samples from your vest in a timely fashion, or expect a smell which will curl your hair when you get around to it...Once, while teaching a class, a lid came off a forgotten vial in my vest. The stench fairly cleared the room, and provoked some serious questions about my personal hygiene.

Bugs in Books...

So you've collected a hat-full of insects; now what? Well, you might pick up a copy of *Western Hatches*, by Rick Hafele and Dave Hughes (Frank Amato Publications, 1981). Not only do Hafele and Hughes describe in detail the insects you're likely to encounter in California waters, they provide a number of imitative patterns, as well as tips on presentation. Good stuff...

The best way to store insect samples is in rubbing alcohol - drugstore variety *isopropyl* - inside of clear glass bottles. Unhappily, the alcohol does pose problems: over time you will notice colors bleaching out of your samples, which makes it difficult to match your pattern to the original; and alcohol tends to make samples brittle, therefore fragile - this hampers attempts to remove them for close examination. Although professional entomologists use a mixture referred to as AFA (alcohol, formalin, acetone) which resolves these inconveniences, this embalming mixture is potent enough to cause cancer in humans...Perhaps it's best to stick with alcohol.

As to bottles, any number of products come in clear glass - a trip through the dishwasher and a rubdown with paint thinner will take care of residual labels or glue. Since I live in gold-dredging country, I find the vials used by miners particularly useful.

A LAST NOTE: learning the bugs you see while fishing is no more absurd than learning about the birds or wildflowers. You'll find insects every bit as colorful, intricate, delicate and beautiful as anything in nature. Knowing about them will certainly add to your appreciation of a lake or stream's entire ecosystem, and could quite possibly attach you to a few more fish.

Getting Embalmed (An alternative solution)

Seth Norman notes that a cure for brittle-bug syndrome is the formula Sheridan Anderson reveals in *Cripple Creek Manifesto* (Frank Amato Publications): an 80/20 blend of denatured alcohol (available from any hardware store) and glycerin (from a pharmacy). "I've got a three-year-old hellgrammite still as soft and supple as a girl I dated in high school. Probably just a coincidence that it looks so much like her father."

In emergencies, Seth has employed Smirnoff in a one to one ratio: "One shot for me, one for the bugs - I like to see smiles in my vials. Lose the lime, though; it cooks them. To handle these he uses soft tweezers that are also handy for picking smaller mayfly nymphs from the screen of his seine. As to the *Pteronarcys california*, "Stick to a headlock. *Way* too many legs for a full-Nelson."