



MILWAUKEE LAKE & STREAM FLY FISHERS *The Hatch*

Milwaukee Lake & Stream Fly Fishers, Inc.
<http://www.mlsff.org/>

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Anatomy of a Hatch

Understanding the mysteries of emergence behavior is the key to success.



THERE ARE FEW PHENOMENA on a river that excite fly anglers more than a strong hatch. In fact, many fishermen describe their trips to the water more in terms of the insects than the fish. Consider a trip I made to the Missouri River last summer. When someone asked how the fishing was, I inevitably described it by saying, “Well, the morning started with an awesome hatch of tricos. A few PMD’s came off in the early afternoon, and the evening caddis hatch was amazing.” For many of us, the quality of the hatch has as much to do with our feeling about a day’s fishing as do the number and size of fish. Given that this is such a central part of the fly-fishing experience, we should clearly understand what a hatch is and what takes place.

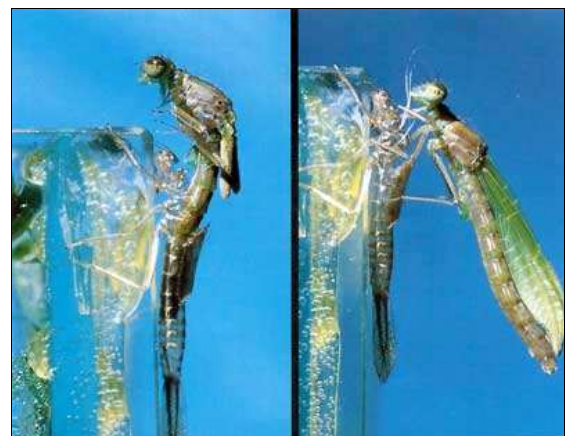
First, the term “hatch” is a bit of a misnomer as used by fly fishers. Webster’s dictionary—and most people—define a hatch as something emerging from an egg. Even entomologists use the term to refer to the moment when the young insect escapes from its egg. Entomologists also have a technical term for this: eclosion.

Fly fishermen, however, use the term “hatch” to describe the moment when adult insects pop up on the water’s surface and fly off. This occurs after they emerge from a nymph or pupa rather than an egg. The term “emergence” is also commonly used to describe that event. Among fly fishers, hatch and emergence are used interchangeably.

In most cases, the hatch happens on or just below the surface. But there are exceptions, and it is important to understand the different hatch behavior exhibited by different aquatic insects. This is the factor that determines what patterns and tactics you should use.

The Pre-game Show

Before adult emergence begins, a period known as the “pre-hatch” often occurs. This phase is sig-



Not all aquatic insects hatch in the water. Like stoneflies, damselflies crawl out of the water — climbing up weed stalks, bushes, or dock pilings — before emerging from the nymphal shell.

naled by changes in nymphal or pupal behavior. For example, the pre-hatch of many stonefly nymphs takes place a few days to a week or more before emergence. During this stage, mature stonefly nymphs migrate from mid-channel areas toward the shoreline, where they wait until just the right moment to hatch.

Some mayfly nymphs also exhibit pre-hatch migration within a stream or lake. For example, gray drakes (*Siphonurus* sp.) and many mahogany duns (*Paraleptophlebia* sp.) move from moderately fast currents to shallower and slower areas near shore shortly before hatching.

For other species, such as blue-winged olives or the pupal stages of many caddisflies and midges, the pre-hatch does not involve moving to a different habitat. Instead, it simply means an increase in activity. Mature blue-winged olive nymphs drift more frequently in the current. Caddisfly and midge pupae often drift along the stream bottom for several minutes to an hour or more before beginning to rise up to the surface.

Specific pre-hatch activity varies considerably between different species, but in most cases it involves behavior that increases the insects' exposure to feeding fish. For this reason, fly fishers should be aware of the pre-hatch and try to take advantage of it. This most often means fishing nymph or pupa patterns along the bottom several hours to several days before you expect the adults to appear. While many fly fishers may not find this as exciting as fishing surface flies during the hatch, the number of fish caught by imitating this pre-hatch activity will convince most anglers to pay attention to it.



There are many styles of flies that imitate emerging insects. Clockwise from upper left: a floating mayfly emerger, a Flymph, a CDC Caddis Pupa, and mayfly surface emerger. Photo by David Klausmeyer

Once the pre-hatch ends, the true hatch begins. At that point, there are three main types of behavior to be aware of: terrestrial emergence, sub-surface emergence, and surface emergence.

Land Lubbers

Terrestrial hatches occur when the mature nymph or pupa crawls out of the water so that the adult can emerge on land rather than in the water. Obviously, the adults are not readily available to feeding fish. But the nymphs or pupae crawling towards shore offer a target to hungry fish. Stoneflies best represent this type of hatch behavior.

As noted above, stonefly nymphs migrate from mid-channel to near shore several days to a week or more before crawling out of the water for adult emergence. Nymphs are more exposed to feeding fish during

these shoreward migrations and provide some excellent nymph-fishing opportunities. Dragonfly and damselfly nymphs also crawl or swim to shore and then wriggle out of the water before the adults hatch. Trout target the migrating nymphs just like they do stoneflies.

Alderflies and hellgrammites add another twist to terrestrial emergence. These insects, both in the order Megaloptera, go through a pupal stage prior to adult emergence. The pupae of most aquatic insects develop underwater. Not so for Megaloptera. In their case, mature larvae crawl out of the water, dig into the soil along the bank, and pupate on land. When the pupae are mature, the adults crawl out of their pupal cells and fly away without ever touching the water. Many aquatic beetle species have similar behavior, which allows the pupa and adult stages to completely avoid swimming predators.

Underwater Emergence

Subsurface hatch behavior means that the adult hatches from the nymph or pupa underwater. The adult rises through the water column, breaks through the surface film, and then drifts on the water's surface until its wings harden and it can fly off. The underwater adults are usually buoyed to the surface by gas bubbles trapped under their exoskeleton, and they are very vulnerable to feeding fish. Numerous species of mayflies, especially in the family Ephemerellidae (pale morning duns and western green drakes, for example), are good examples of this type of emergence.

Because of the vulnerable nature of adults exhibiting this behavior, they are an excellent stage to imitate with sub-surface emerger patterns, such as soft-hackles or Flymphs. In this situation, the patterns are best fished with little action. Cast up and across and let the fly sink. If necessary, mend your line so your fly drifts with little or no drag downstream through likely holding water or areas where there appear to be rising fish. Often, such rises are made by fish feeding just below the surface on the helpless adults.

As your fly drifts, you can gently raise your rod tip so the fly swings towards the surface. This gentle rising action often results in a solid take. But strikes can also be subtle, and because the fly is underwater you can't always see the bite. Watch your leader carefully for any unusual movement. At the slightest hint, lift your rod to tighten the leader. If there is a fish on, you will be able to quickly set the hook. If there is not a fish on you can drop your rod tip and continue fishing. This technique works wherever insects with this behavior are hatching, including in riffles, runs, flats, and even lakes. Finally, because the adult (or the dun in the case of mayflies) is rising to the surface, your fly patterns should be tied to match the color and size of the adult, not the nymph or pupa. There can be a considerable difference in color between these stages, so this is an important point to remember.

Reaching the Surface

The surface hatch of aquatic insects is such a situation. Surface hatches begin when mature nymphs or pupae leave the relative safety of the stream or lake bottom and swim to the surface. Swimming ability varies considerably among different species, but even the fastest are no match for a trout. During a surface hatch, the first stage you should imitate is the nymphs or pupae swimming up through the water column. Once at the water's surface, the nymph or pupa hangs in the film while its exoskeleton splits open. At this point, the winged adult wiggles free and pops out on the surface where it floats briefly before flying away. From the moment the nymph or pupa reaches the surface to the time the adult flies away may take a few seconds to more than a minute, depending on the species and weather conditions. During this time, no matter how brief, the nymphs and pupae below the surface and the adults on the surface are sitting ducks for trout. This process seems much better designed to feed fish than to get the adults safely from water to land. For fly fishers, such behavior provides the best opportunity to take fish with dry flies.

Surface hatches occur in all major aquatic-insect groups except stoneflies and Odonata (dragonflies and damselflies). The most important are mayflies, caddisflies, and midges. Within these three groups, dozens of species provide fly fishers the opportunity to see and catch fish feeding with abandon on the surface. But not all the activity is surface feeding. What appears to be surface feeding is just as often fish hunting nymphs or pupae below the surface. Or the fish may be chasing insects in the surface film that are in the midst of emerging from nymph or pupa to adult.

In the latter situation, the insect has characteristics of both nymph or pupa and adult. There are hundreds of patterns designed to imitate the subsurface stage, as well as the transitional stage from nymph or pupa to winged adult. One of the best sources of information about such emerger patterns is the aptly titled *Tying Emergers* by Jim Schollmeyer and Ted Leeson (Amato Books, 2004).

Those individuals not eaten while swimming upwards or while hanging in the film finally become adults on the surface. When fish turn their attention to this stage, it is finally time to get out your dry flies. Again, there are lots of patterns that imitate myriad species of aquatic insects in various types of water.

For example, different patterns may be called for when you're fishing in a fast riffle section versus fishing the same hatch on a smooth, flat glide. Fly-flotation requirements, along with how well the fish can see the fly, influence what patterns will prove most effective. In all cases, make sure your patterns closely match the size of the naturals you are imitating and that you are presenting your flies naturally. Most of the time this will be a "dead drift." But some species, especially adult caddisflies, run or skate across the surface, and your presentation should match their behavior.

The next time you encounter a good hatch, stop to consider what type of hatch behavior is occurring. Are they crawling out of the water, hatching below the surface, or hatching on the surface? How and where are the fish feeding? What size, shape, and color are the naturals? If you can answer these questions, you'll likely have more to talk about than just a good hatch.

| Insect Group | Terrestrial | Sub-surface | Surface |
|---------------------------------------|--------------------|--------------------|----------------|
| Mayflies | X | X | X |
| Stoneflies | X | | |
| Dragonflies & Damselflies | X | | |
| Alderflies & Hellgrammites | X | | |
| Caddisflies | X | X | X |
| Midges (Diptera) | | | X |
| Crane flies (Diptera) | X | X | |
| Black flies (Diptera) | | X | |
| Aquatic Beetles | X | | |

This article first appeared in American Angler.

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March Meeting!

Fly and Knot Tying and Fly Fishing 101!

Since our February meeting was snowed out, we will feature club fly tyers doing some of their favorite patterns, and a bit of knot tying expertise thrown in as well at our March meeting.

The following guys will be on hand to tie up their favorites and will show you how it's done, too:

Dick Dragiewicz -- knot tying

Herb Oechler -- a couple of patterns with snowshoe hare fur in them.

Greg Schick-- DOA Duns (a "cripple"), Iris Caddis, and an emerger pattern or two

Joe Valkoun — tying with CDC

Barry Wichmann -- Thread midges

Ron Wojack -- Brassies, UV Midges, Poly Yarn Caddis dry fly.

Glenn Winston — favorite Beadhead patterns

Frank Stetzer will be there, and maybe even Warren Huck, but it's not known as yet what they'll be tying!

In addition to having a lot of interesting fly tying going on, we're inviting interested folks that we meet at the Southeastern Wisconsin Hunting & Fishing Expo in Oconomowoc to come to the meeting, too. So in addition to the fly tying, you'll be able to pick the brains of our tyers & other members to answer any questions you have about fly fishing, whether it be gear or tactics. Nothing formal, mind you, but more of a "bull" session among those in attendance.

Fishing in Other Places:

Summer in New Zealand... THEIR summer, that is!

Don Putning writes: "We have been working our way up the island. Kingston, Wanaka, & Hokitika, next week Motueka. I've been fishing smaller rivers, fewer but larger fish. In the Brightwater spring creek which is about a 1000 yds long, I caught a fish that was rising 18' ahead of me. I only had my leader and 1' of line to cast. The second pic is of the hook set. The result was a 22", 4.5 pounder. Two days later I had my best day ever, (4) fish 22 to 24"- 4.25 to 4.75#, all on Dads Favorite size 18. I even had a "Monster" on for a few seconds, until my loop fly knot failed!! I'll try to do better next year. He is impressive, not a rise more of a lunge. I'm going to keep my Karma up, I never want to be reborn a Mayfly on the Brightwater!! I have been on spring creeks ever since and caught my largest so far Wednesday, 17 Feb, a male 25.5"-7.25# (photo). I'll try to send more next week. Tight lines, Don





Don with his 22", 4.5 pound brown trout on the Brightwater!



A nice 25.5", 7.25 pound rainbow on a NZ spring creek!

March Outing

Let's get ready to go trout fishing on March 27th!!

By the time read this the early trout season will be ready to begin! While our first real road trip of the new year will be a couple of weeks later, it'll be a good one as we're heading out to the Blue River. The stream received a ton of improvements from the Harry & Lora Nohr Chapter of Trout Unlimited last year, and you'd hardly recognize it from what it looked like after the "flood of 2008"!

The plan at the moment is to fish from Snow Bottom Rd. upstream to Bluff Road. (Just below the Bluff Road bridge is where I lost a very nice 18"-20" rainbow last September when I tried to muscle him away from the weeds while using 6X tippet... Boy, was I disappointed when I screwed up that hook-up!!)

The stream improvements were done from Snow Bottom Rd. up through the pasture / "orchard" section of the stream, stopping just before the "corn field" about midway between Snow Bottom and Bluff roads.

There will be NO organized car pool / caravan for this one so check out the club map and fire up your Garmin to get you to the parking area at Snow Bottom Rd. Probably shoot for a 9:00 or 9:30 start time for the fishing. That will give the sun a bit of a chance to get up into the sky a bit and maybe add some warmth to the valley and the stream! It also means you probably won't have to leave home before the sun comes up, too!



This a downstream view of the pasture / orchard section of the stream last September after the improvements were done and before the grass took root. You'll be amazed how different it really looks!

It's really a beautiful stretch of trout water now!!

For more information, talk to Greg Schick at the membership meeting on Tuesday!

Renewal Reminder!!

If you haven't renewed your membership yet, then please read on!

If you're reading this from the club website, please print and then fill out one of the membership applications from the club page. (See the "Join ML&SFF" link on the club site.) Please don't forget to fill one out when you submit your 2010 dues! Also, please be sure to let us know your email address and phone number so we can keep our membership information up to date! If you get the Hatch via "snail mail", we'll have applications for you to fill out at the membership meeting on the 9th!

Dues for 2010 remain \$25 for an individual and \$35 for a family membership. Remember it's your renewal that keeps our club vibrant and allows us to bring in the various speakers that we've had. Hopefully you've all been able to upgrade your fly fishing knowledge and catch more fish in more places!

Send the renewal sheet along with your check to the address on the bottom of the form!
Thanks for being a member!

2009 Milwaukee Lake & Stream Fly Fishers Officers and Committees

Officers / Board of Directors

Greg Schick, President
262-635-0522
gaschick@wi.rr.com

Dave Gonzales, Vice Pres.
262-498-0629
flytying2415@yahoo.com

Frank Stetzer, Secretary
414-481-8935
stetzer@csd.uwm.edu

Jim Johnson, Treasurer
262-549-4868
jjrdjohnson@yahoo.com

Peter Alba, Member at Large
262-780-6259
Palba@Amfam.com

Joe Valkoun, Member at Large
414-481-9987
Jcvalkoun@milwpc.com

Barry Wichmann, Member at Large
414-281-7511
bwichmann@wi.rr.com

Ron Wojack, Member at Large
414-281-2947
wojaxx@wi.rr.com

Committees:

Education:

Dick Dragiewicz, 847-498-3260 obiobiobi@ameritech.net
Greg Schick, 262-635-0522 gaschick@wi.rr.com
Ken Zielinski, 414-425-9077 flyyeguy@wi.rr.com

Fly Tying:

Greg Schick, 262-635-0522 gaschick@wi.rr.com

Hatch Editor:

Greg Schick, 262-635-0522 gaschick@wi.rr.com

Membership:

Dave Gonzales, 262-498-0629 flytying2415@yahoo.com

Outings:

Ken Zielinski, 414-425-9077 flyyeguy@wi.rr.com

Raffle Merchandise:

Dave Gonzales, 262-498-0629 flytying2415@yahoo.com

Web Master:

Frank Stetzer, 414-481-8935 stetzer@csd.uwm.edu

MILWAUKEE LAKE & STREAM FLY FISHERS

2010 CALENDAR

| | March | April | May |
|---------|--------------------------------------|---------------------------------------|---------------------------------------|
| Meeting | 9th @ Yester Years Pub & Grill | 13th @ Yester Years Pub & Grill | 11th @ Yester Years Pub & Grill |

| | | | |
|---------------|--|---|---|
| Fly Tying | 10th and 24th | 14th and 28th | 12th and 26th |
| Special Event | Early Season Trout Outing to the Blue River 27th | Early Season Trout Outing to Black Earth Creek 24th | "Long weekend" road trip to the Iowa Driftless Region 20th—23rd |

| | |
|------------|---|
| Meeting: | September through April: 7 pm Yesteryears Pub & Grill 9427 W. Greenfield |
| Outing: | See Hatch for details. Sign-up sheets will be at meeting previous to outing date. |
| Fly Tying: | Gander Mountain, 27th St. & Rawson Ave, from 6:00 - 8:30 pm. |
| | |

The Hatch is the monthly newsletter of the Milwaukee Lake & Stream Fly Fishers, an incorporated nonprofit organization affiliated with the Federation of Fly Fishers.

Milwaukee Lake & Stream Fly Fishers meets the 2nd Tuesday of each month at 7 p.m. at Yester-Years Pub & Grill, 9427 W. Greenfield Ave., West Allis, WI

Meetings May through August are on the water. Read **The Hatch** for locations or go to our website at: <http://www.mlsff.org>

Send correspondence to:
Milwaukee Lake & Stream Fly Fishers,
P.O. Box 370668
Milwaukee, WI 53237

Submit contributions for **The Hatch** by the
20th of the month to:
Greg Schick, Editor
at: gaschick@wi.rr.com

"Playing a big trout in swift water is akin to flying a kite on a blustery day. The more line you let out, the more trouble you're going to have getting it back."

~ Jimmy D Moore

"I look into my fly box, and think about all the elements I should consider in choosing the perfect fly: water temperature, what stage of development the bugs are in, what the fish are eating right now. Then I remember what a guide told me. 'Ninety percent of what a trout eats is brown and fuzzy and about five-eighths of an inch long.'"

~ Allison Moir "Love the Man, Love the Fly Rod"