A publication of the Kiap-TU-Wish chapter of Trout Unlimited, No. 0168, P.O. Box 483, Hudson, WI 54016
E-mail RipRap at turiprap@hotmail.com **Visit Kiap-TU-Wish on the web at http://www.lambcom.net/kiaptuwish/**

RIPRAP

Kiap-TU-Wish Trout Unlimited March 2002

President's Lines

As many of you may know, I am a Sales and Marketing Manager for 3M -not a scientist, chemist or other such thing. I'm a reasonably intelligent guy, but there is something I just don't understand:

How can it be acceptable to discharge water (from the proposed Roberts/Hammond water treatment plant) into the groundwater (which will flow into the Kinnickinnic less than 2 miles away) when that same water is considered "unfit" to be discharged directly into a larger river like the St. Croix?

But that is exactly what is being proposed under a sweetheart deal between a developer and the Wastewater Treatment Commission for the Roberts/Hammond area. Up to a million gallons a day is proposed to be discharged from this plant into the ground water! Never mind the impacts to the wells of the unfortunate souls "downstream" or the devastating impacts on the Kinnickinnic with increased discharges of phosphorus and nitrogen. These single-focus folks only care about lining their pockets and/or coming up with the cheapest, easiest way to solve their problem ....and to heck with everyone else. This group seems to have no vision beyond their problem, or their opportunity for profit.

Both Kiap-TU-Wish and the Kinnickinnic River Land Trust will try to do everything possible to stop this project and we will need your help. We need to show up IN MASS to future meetings and voice our disgust at this plan! Please sign up for the email list on our site so we can get notices to you. We HAVE to show up for these meetings. The future of the Kinnickinnic DOES depend on it.

Andy

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Bert Appelgren, 1928-2002

Bert Appelgren, who served as DNR Fish Manager for this area for many years, died in February at the age of 73. Mr. Appelgren worked hard on trout management. He acquired the first long-term easements on the Kinnickinnic and he discontinued stocking that river after his electrofishing studies indicated it was counterproductive. He initiated fall stocking of fingerlings in the Willow River and began the stocking of rainbow trout in the Rush. Mr. Appelgren worked closely with Kiap-TU-Wish, developing the chapter's first brushing projects on the Kinnickinnic. He retired in 1984.

Getting Down to Business

By Jon Jacobs

The chapter will hold its annual business meeting on Wednesday, March 6 at 7 PM (Dinner will be available at 6PM). The meeting will be held at the chapter's regular meeting place, Bob Smith's Sports Club, 601 2nd Street, Hudson, WI. The primary item on the slate this year is the election of three board members. Kent Johnson's three-year term is expiring, but Mr. Johnson has expressed a willingness to serve another term. Craig Aschenbrenner joined the board last year to fill the final year of Andy Lamberson's term after Mr. Lamberson resigned, having decided to concentrate on his chapter presidency. Mr. Aschenbrenner is now running for a standard three-year term. The bylaws allow for the nomination of two additional nominees from the floor at the meeting. Additionally, there is a two-year term board position that Ted Mackmiller is completing. While nomination from the floor is required for this position, Mr. Mackmiller has expressed a willingness to serve an additional term.

The meeting will also feature reports by chapter officers and committee chairs and any other necessary business.

Special Guest at Business Meeting

By Jon Jacobs

Chris Lemmon, a research specialist in fisheries, wildlife and conservation biology will speak to us about whirling disease at the March meeting. Whirling disease has been a plague on fisheries in the Rocky Mountain West and there is evidence that conditions in our area could lead to a possible outbreak. Mr. Lemmon will update us on the current state of research on this menace.

Fly Tiers Wanted

By Jon Jacobs

The late Dick Frantes was an inept fly tier, but a great judge of talent in that area. We'll remember Dry Fly Dick at our April meeting with fly tying demonstrations by tiers who tie in a variety of styles and from whom Dick would loved to have cadged flies. If you have patterns or techniques that you'd like to share with your fellow piscators, call Jon Jacobs at 715-386-7822 (H) or 763-392-6245(W) and we'll put you on the bill.

Clinic Date Set

By Michael Alwin

The date is set, the die is cast. The annual Kiap-TU-Wish Fly Fishing Clinic is set for June 1st, 2002. The clinic will run from 1:00 - 9:00 PM and will include supper as in years past. As always we'll need volunteer hours. You can choose to work a shift at the clinic or tie a bunch of flies for the students. If you choose the latter we can use soft hackles, nymphs and Sulphur and Baetis dries. To volunteer, call Michael Alwin at 651/770-5854.

Michael Alwin, of Stillwater, MN, is the proprietor of Bob Mitchell's Fly Shop in Lake Elmo, MN.

Outrage

Editorial by Jon Jacobs

This is the way the world ends not with a bang but a whimper...
-T.S. Eliot

Read Andy Lamberson's President's Lines in this issue and you will reach the inescapable conclusion that he's had it – that he's "mad as hell and not going to take it any more," to cop a phrase from the movie *Network*. As a child of the sixties, I say, "Right on!" Some years ago, when I observed craven mendacity in the actions of the political power structure in the Kinnickinnic watershed, I penned a screed that took broadsides at everyone whom I thought stood in the way of protection and preservation of the Kinnickinnic River. Since the chapter has had to maintain some sort of working relationship with many elements of that structure, it may be just as well that the document wasn't much circulated. Still, I stand behind every word I wrote and, considering the incredible abuse of the Kinnickinnic watershed we're willing to countenance, I believe what I wrote ten years ago might be even truer today.

Development and trout streams are incompatible, it's as simple as that. The further problem is that the great

majority of people do not value wildness, much less wild fish. I'm convinced that the average American's idea of nature is a nice green lawn or golf course and a somewhat unobstructed view of the horizon. In an insightful article about the Columbia River system in *Trout* magazine a couple of years ago, the author made the point that we have and keep what a culture values. In the Pacific Northwest they value cheap aluminum production and apples, not pacific salmon. Here in the Midwest we value unlimited and uncontrolled development done at the lowest possible cash outlay. What else could explain a political climate where it's acceptable to pre-plan the ruination of an entire watershed? Ten years ago an agribusiness person wrote in a letter to the editor of the River Falls Journal that the river was a "drainage ditch, sucking excess water out of the land." Well, it's apparent from the actions of the folks up in the river's headwaters that in the intervening years that outlook has gained ground.

Back when I lost my temper, Anne Brataas had written a column for the *St. Paul Pioneer Press* about the extinction of the passenger pigeon, an animal that was once so abundant in the Midwest that flocks of them would blot out the sun. The commonly accepted cause of their demise was market hunting, but more recent thinking indicated that the cause may have been much more complicated. It may have been that the nut-bearing hardwood forests in which the birds had nested in huge colonies became fragmented by clear cutting, disrupting the birds' social lives and nesting habits to the point that the population had begun to crash before the market hunters polished them off. Little by little, development is insidiously fragmenting the Kinnickinnic's watershed until, with one final whimper, we will have a broken river no longer capable of supporting wild trout. Sure, all those 21st century immigrants to western Wisconsin will have the aforementioned green lawns and a view of the limestone hills on the horizon. And they'll have a pretty little river winding between those hills, but that setting will be nothing more than the natural equivalent of Lenin's tomb: A beautiful mausoleum with a good looking, yet lifeless body as its centerpiece. And you? You'll have one less place to fish for wild trout.

It's well past time for you to become as angry as Andy and I. Do as he suggests: Get to the meetings, voice your opinions, hold people responsible and defend the Kinnickinnic. Here's another phrase from the 1960s: "You're either a part of the problem or a part of the solution." Which are you?

Hot Stuff

By Jon Jacobs

RipRap takes up the topic of flytying in this issue in celebration of both the impending season and our annual Dry Fly Dick Frantes Memorial Flytying Extravaganza. **Skip James** contributes an absolutely first rate article on tying and fishing spinner patterns, while **John Koch** and **Mike Edgerly** speak to the more emotional side of tying and **Clarke Garry** tells us about some real flies. I'd like to throw in my two bits worth with a quick review of some hot flies and materials that have recently come to my attention.

The Clouser Minnow: I've used Clousers to catch brook trout, brown trout and two species of bass. This is one brilliantly executed jig, with barbell eyes that weight the fly to ride hook up, making it both rock and weed resistant, and balance it so that it "jigs" well. The sparse tie and non-buoyant materials help it get down NOW, too, allowing one to fish deep easily.

Woolhead Sculpin: I learned to tie this from a Feather Craft pattern sheet, which cost one dollar. I learned how to stack wool from it, a skill that had previously eluded me. Help electrofish the Rush and you'll want a sculpin pattern in your fly box, too.

The René Harrop Hairwing Dun: I just discovered this one. It's sort of a hackled comparadun with the hackle trimmed flush across the bottom and the wing extending back from the head of the fly. It looks dynamite.

Turkey Biots: Wet them before you wind them and they're easy to use, making some of the neatest segmented mayfly bodies you'll ever see.

Turkey Tail Fibers: These will tie the fuzziest and most nicely colored small pheasant-tail type nymphs you'll find.

Mayfly Spinners- Forgotten Food

By Layton James

So much has been written recently about nymphing... "70% of a trout's feeding activity is subsurface", so much about fishing hatches, that the final life stage of a Mayfly has been sadly neglected. Of course, spinners are easy to ignore. Until fly fishers demonstrate a willingness to wear night-vision goggles and fish until the early-morning hours, most spinner falls will take place out of sight and out of mind. Happily, the tiny Trico more than makes up for the prevailing nocturnal habit of its sister species by mating in

the bright light of morning, and over more than three months of the trout season!

Why do spinner falls occur at night, or under low-light conditions? The only plausible explanation I can think of has to do with predation by birds, who must find it at least a little more difficult to seize airborne flies in darkness. On the other hand, the food value of a Mayfly spinner is probably a good deal less than a plump, freshly hatched dun, to either a trout or a nighthawk. Evidence of a previous evening's spinner fall can often be found in streamside eddies, where thousands of dead, floating insects circle round and round. Search also the dew-dropped spider webs, where dead Mayfly spinners wait to be eaten at leisure. Astream in the morning, when there are no hatches in evidence, one can often find a trout or two feeding at the surface near the bank, lazily sucking in the last revelers from the night's mating orgy. As one who often fishes without a single subsurface fly in his kit, I often use a spinner pattern to sight-fish for these risers. Many respected Eastern authors (Schwiebert, Marinaro, Harvey, Atherton, Flick, et al.) have written about fishing spinner imitations at last light in the tails of pools, arguing that stealth and a fine presentation might result in the best fish of the day. In my experience, most of the fish found feeding in the quiet tailouts are small and hardly worth the effort. Most of our larger fish are found where the food is most concentrated...in riffles or where a strong current sweeps against an undercut bank. The locations of feeding lies, coupled with the fact that spinners are generally nocturnal, govern the design principles for my spinner imitations. Low light diminishes the importance of color, while increasing the importance of silhouette. Regard the venerable Rusty Spinner, used by many of us to represent the sexually mature individuals of whatever species seems to be on the water, from Baetis to Ephemerella, from Stenonema to Isonychia. With its somber-hued reddish-brown body and dun wing, in appropriate sizes, it serves for all, as long as you fish it in the dark of late evening. As a tasty treat for those dawn spinner sippers against the banks, it's quite useless, unless you run across a really dumb fish.

To be fished in full light, effective spinner patterns need to match the colors of the natural. Is an egg-sack a necessary component of a good imitation? I've only been rejected on that account on one occasion, an August evening on the Yellowstone River in the park, near the Sulphur Cauldron in 1981. After dinner, Mike Hipps and I had spaced ourselves in thigh-deep water, close enough to reach a line of Cutthroats that rose regularly through the glassy surface to take PMD spinners. As the sky changed from blue to gold to rose, and the moon appeared over the mountain, we repeatedly cast #18 Rusty Spinners to the rising trout, and they, in turn, ignored every offering. Before leaving the river, fishless and dejected in the dark, we captured several insects with a piece of fine netting and examined them upon our return to our cabin. The ratio of males to females was about five to one, and the three females we had captured all had bright chartreuse egg-sacks. We tied new imitations that evening, complete with egg-sacks, and were in position the following evening to test them over the same trout as the night before. What a difference! Between the two of us, we hooked and released nine fine trout. We reasoned that there might have been enough naturals on the water that the fish could become selective to the egg-bearing females. But that day on the Yellowstone is the only time that I have experienced that degree of selectivity.

One of the problems of spinner fishing that I've encountered is the difficulty of seeing my imitation in streamy water. Although my eyes are not as good as they once were, the problem seems to be fairly universal, especially under low light conditions. An upright-wing dun stands out just fine, but a flush-floating spinner does not. Sometimes, by changing your casting position to maximize whatever light is available, you can make the job easier, but sometimes that isn't an option. I've started tying my spinners with wound-hackle wings, snipping the fibers off the bottom so that the fly floats in the film. That corona of hackle on the top of the fly greatly increases its visibility without diminishing its effectiveness. In order to get the width of wing right, I palmer the hackle about a third of the hook's shank length.

Gary Borger has been a proponent of Twinkle Organza for spinner wings. I went to a fabric store the other day to purchase some, but the only colors available were in Viking purple and "tutu" pink! Gary pulls out the Organza fibers and binds the clump to the hook in spent-wing fashion. I've experimented with Tulle, the fine-deniered netting material used in bridal veils. A hook-gap-wide strip of Tulle, tied as a spent-wing, looks very convincing, but needs lots of floatant to counter the capillary effect of all those little holes. And, neither material is as durable as hackle. Use of Badger hackle for spinner wings, with a darker strip next to the stem, eliminates the need to build a dark thorax with dubbing. When wound on the hook, the dark part of the hackle suggests the thorax very convincingly. I use long saddle hackle for winging most of my smaller spinners, #16 -#24.

Tailing for spinners depends upon the size of the imitation. On a large spinner imitation, (#10-#14), deer hair, moose mane, or stiff hackle fibers work well. On smaller patterns, (#16-#20), Micro-fibbets are very realistic. On the smallest patterns, I prefer Squirrel tail fibers. They provide a wide range of color variations, depending upon whether the tail comes from a gray or a fox Squirrel, and, as a bonus, they float very well. Remember to splay the tails wide, to aid floatation.

I don't think dubbed bodies are necessary in spinner imitations smaller than #14. Generally, I just use the

appropriate color tying silk and leave it at that. Too many commercial spinner patterns are simply too bulky to fool the trout. When a spinner falls to the water, after all, there's not much left of it to imitate, except wings and tails. One largely overlooked characteristic of Mayfly spinners is the curved position in which they die. If you examine dead spinners, notice that most of them have curved abdomens. This may be caused by some sort of insect rigor mortis. A slick way to imitate this common feature is to employ a curved hook like Tiemco 2487. First tie the tail fibers in halfway around the bend of the hook, so that they point downward, as you look at your fly in the vise. Continue winding the thread to the midpoint of the shank. Tie in your hackle, and palmer to just behind the hook eye. Tie off. Before trimming the hackle, turn the fly in the vise toward you, and remove the fibers on one side, either right or left. When the fly is removed from the vise, you will see that you've made an imitation that will float in the same plane as the hook bend, with no point hanging down to warn a wary trout. It doesn't tangle your tippet when casting, either.

I bought a 2-weight rod a few years ago, just to fish the Trico hatch. Although I've caught plenty of fish with that rod, I think that my 5-weight does a better job of delivering the "Puddle Cast" that gives my Trico spinner maximum float time when I fish in riffles or other places with confused currents. The heavier line creates a more emphatic "bump" when I stop the cast in midair, and seems to help my long leader fall in a heap more easily than what I can accomplish with the 2-weight. As long as the slack leader uncoils, the fly will float naturally. The trout isn't expected the spinner to fly away, and he can be maddeningly deliberate in taking your fly, especially if he's been feeding for a couple of hours or more in the same location. You need all the float time you can get.

One aspect of dry-fly fishing that you don't have to worry about while fishing spinners is "the appearance of life." Whether it's John Atherton's theories of color breakup, or Leonard Wright's "sudden inch," keep in mind that Mayfly spinners are dead. It's tempting to think that a dead insect might be easier to imitate and fish than a live one. Unfortunately it's not, but tying and fishing their imitations will add to your trout fishing knowledge and pleasure. Don't pass up the opportunity to add spinner fishing to your repertoire of techniques. It will pay off handsomely in both fun and fish.

Layton James, of St. Mary's Point, MN, is a keyboardist with the St. Paul Chamber Orchestra.

Seniority

By John Koch

I have a love/hate relationship with flies. An impatient sort from the start, I struggle with them at all stages. It starts with tying: tiny hooks disappearing into the debris on the floor, brass beads rolling off into eternity. The thread is always too thick or too thin, but never half as thick as it needs to be.

Sometimes I think that the spirit of whoever's hide I'm trying to use is getting its final digs in - I've been banned in the past from cooking when an elk hair was found in the stir fry. And by the way, what's that smell coming from the feather drawer...?

So with this in mind, I'm truly astonished on occasion to find a trout fly, one of those magnificent sculptures of aquatic fauna rendered in feathers and fur, firmly held in the jaws of my fly vise, apparently tied by me.

When I was growing up, my father's depression era frugality was firmly instilled in me, even in fly fishing pursuits. With money earned from helping the neighbors by picking rock in the spring and making hay in the summer, what flies I didn't filch from Dad I bought individually - the thought of flies by the dozen was unheard of. I begged to go along on the monthly trips to the grocery store, whereby I could visit the hardware store next door. There I hovered over the selection in agonized indecision over which one or two trout flies would be the best choice for the few cents I had to spend. Once part of my small reserve, a precious fly was retrieved from even the most hideous tangles in the tallest trees. It was hoarded and pampered until it disintegrated into a rusty, feathery dust.

I really see it as no surprise then, when I get a little attached to one of the rare, well-tied gems in amongst the melange of fuzzballs coming off my fly tying bench. I find the personal relationship I've developed with my flies as kind of natural, in a way.

His name is Larry. He is a #14 Bead headed Caddis pupa that I've carried around for about 10 years now. With an olive body tied with olive thread, Larry used to have a collar of dark brown soft hackle, but most of it has pulled out over the years. Larry's bead head, once a gleaming brass, has been worn to its shining steel core.

I had earlier in the week lost that fly, as yet unnamed, to some stream side brush hanging over a favored riffle run, then later found him again fishing one day after I had mistakenly launched one of his cousins into the same bushes. A dark hollow beneath fragrant honeysuckles, the hole had produced many fine trout over the years, but is a difficult spot to reach, both because of the fast water, and because of the overhanging vegetation. I had missed a fish with a nice drift, and had reacted by getting excited and immediately re-casting into the brush. A tentative, light

tug broke the offending branch off, and when I went to unhook my fly from the twig, there was Larry.

After he had been first tied, Larry was part of the normal line-up, used whenever his services were deemed necessary. But his loss, and subsequent return to me, changed my perspective. I came to respect Larry, not for his fish catching ability, but more for his mutt-like appearance and unflagging faithfulness. The soft-hackle fell out little by little, the dubbing gradually thinned, and the brass slowly wore off to the steel below. I came to expect his presence in my fly box, like that of an old dog on "his spot" on the porch. After awhile, I retired him to a quiet corner of the fly box, where he now holds court over the other patterns.

I have a small few flies in my collection that have reached the same pinnacle as Larry. Some have garnered my admiration as real fish attractors, some for their pure physical beauty. My favorites these days include a whole family of flies that I've tied using various weaving and crocheting techniques. Fun to tie, and glorious to look at, these patterns have the additional property of being durable fish catchers. It was with a heavy heart last year when I lost the first one of this bunch: a #18 Baetis parachute with a CDC wing. I had woven the body with brown tying thread and chocolate brown silk, and it was a beauty. Not long enough in my possession to earn a name, I lost the fly to a fish during a heavy hatch in early April.

As some have risen to glory, so, too, have many more of the flies that I've tied descended the other way. Some are poorly tied experiments, others are locally useless patterns, but all share the same fate. Overlooked and ignored over several seasons of non-use, these flies eventually get demoted to the final humiliation of being purged out of my boxes and tossed into a film canister. Eventually packaged up and sent to my nephews as Christmas gifts, they are at least given a second chance.

The flies that I buy on occasion suffer an even worse fate than those that I've mis-tied. I've come to like the home-spun look of my self-tied flies: the purchased flies' severe uniformity and precision make them look like so much fish-cannon fodder, lined up like pawns to be sent into piscatorial battle. At best, they are quickly used, lost and forgotten. Worse yet is the destiny of the expensive ones...

Last fall while steelheading I quickly ran through the few large nymphs that I had tied, and as nothing else seemed to garner a strike from the small rainbows I had been catching that fine November morning, I broke down and went to buy some nymphs at the nearest flyshop. Seven dollars later and having shrugged off the scornful gaze I imagined my father was giving me, I had in my possession two wickedly tied black stonefly nymphs that looked as though they were ready to crawl across my hand.

A personal affront to him, I could hear my dad's astonished whisper as I sheepishly walked out of the shop: *"Seven dollars? You paid seven dollars for two flies...?"*

They were as foreign to me as a rock from Mars, and as I placed then in my nymph box, they cast malignant black shadows over the ranks of my self-tied pheasant tails and hare's ears. Brash upstarts, the first was quickly lost to a snag while the second tenaciously held on, although later it joined its dark brother at the bottom of the river when it "accidentally" slipped from my fingers when I went to change a tippet.

Larry's shiny steel bead beamed with approval.

John Koch is an artist and fishing guide. He lives in Spring Valley, WI and serves on the Kiap-TU-Wish Board of Directors.

Postcard from The Edge

Perfection

By Mike Edgerly

The perfect fly is like the perfect sentence. Most of us will probably never create either one."

But most of us are able to communicate with one another through the written word and forge utility with something resembling beauty to construct a fly to lure a trout, which is also a form of communication. In the case of the latter, we hope our fly is saying, "This is food." With luck the fish takes, the rod bends and at least one party, and hopefully both, lives happily ever after. We may not have created the perfect fly, but maybe we've created the perfect moment.

But writing isn't fishing. And neither is fly tying. Fly tying is a point of departure on the journey to learning about trout and rivers. It's where we begin to fish.

I don't think you have to be a great fly tier to be a good angler. Good enough will do. The aim should be a well-proportioned fly in the right size and color. Which is to say that lying in your palm it should be about the same size and as close to the color of the natural as possible. This is job number one, in my book. In fact, your flies don't even need wings. Many soft hackle patterns fish just like dry flies. They consist of dubbed, quill or thread bodies, soft hackle and hook. That's it. Or you can reverse the attitude. Forget the hackle, dub a dry fly body, tie in upright wings

and a tail and you have created, for example, a sulfur pattern that rides the current in the film and often gets the job done when trout ignore the standard ties. These are just my opinions of course, and each of us can tie flies any way we want. Unlike Olympic ice skaters, the trout are our only judges.

By the way, here's my try at a perfect sentence: I am fishing.

Mike Edgerly of St. Paul, MN is the News Director of Minnesota Public Radio.

The Little Yellows

By Clarke Garry

There are normally several logistical considerations associated with making subsurface insect collections in the Kinnickinnic River in January, not the least significant of which is removing the creatures from the sorting tray before the motionless water progresses through the slush stage on its way to becoming ice. Once the assemblage is acquired, however, the collector will be rewarded with an interesting diversity of macroinvertebrates, providing evidence of winter insect activity and the promise of coming spring and summer hatches.

Midwinter Kinni collections collectively yield four categories of stonefly larvae (nymphs), each distinguishable by size and color. These are: winter (=little brown) stoneflies (8-12 mm excluding antennae and tails, dark brown to black), giant stoneflies (35-50 mm, dark grayish brown), common stoneflies (15-25 mm, brown with tan markings), and little yellow stoneflies (10-14 mm, yellow to tan, with darker tan to brown markings on the head and thorax, and a striped or spotted abdomen).

The little yellow stoneflies that inhabit the Kinnickinnic River are members of the genus *Isoperla* (order Plecoptera: family Perlodidae). Hilsenhoff (1995) lists 12 species of *Isoperla* from rivers across the state of Wisconsin; four of these have been found to date in the Kinni. These are: *I. slossonae*, *I. transmarina*, *I. bilineata*, and *I. dicala*. Of these *I. slossonae* and *I. transmarina* larvae are collected most often and in highest numbers throughout the lower Kinni region. *I. bilineata* is known as a larger river inhabitant and is collected only in small numbers in the downstream regions of the lower Kinni. *I. dicala* is rare.

Stoneflies in general are a sign of high quality water and this is no less true for the little yellows. Biotic indexing tolerance values assigned to these four local residents are: (based on a ten point scale, 0=excellent, 10=very poor) 0 for *I. transmarina*, 2 for *I. slossonae* and *I. dicala*, and 4 for *I. bilineata* (Hilsenhoff 1987). With the exception of an occasional isolated specimen upstream, the uppermost occurrences of little yellow nymphs appear to be the Quarry Road-Liberty Road areas. This distribution pattern is similar to one that I've observed and reported for several mayflies, caddisflies, and other stoneflies.

At the time these larvae are observed in January, they're only a few months away from hatching. This adult emergence will occur between mid-April and late June. Hilsenhoff and Billmyer (1973) report a sequence of hatches for Wisconsin as follows: *I. slossonae* emerging mid-April through May, *I. bilineata* and *transmarina* mid-May to mid-June, and *I. dicala* late May to the end of June. These species have a one-year life cycle, spending the summer months as eggs, which hatch in late summer or early fall (Hilsenhoff and Billmyer 1973). Collections from the Kinni are consistent with this generalization, as I have not found any of these species as larvae in the river between 9 June and 9 September.

Although most species of *Isoperla* are carnivorous as larvae (Hilsenhoff 1995), earlier studies referred to by Stewart and Stark (1993) suggest that *I. bilineata* is an herbivore. The little yellows themselves become objects of prey and available to fish as they make their way to the shoreline prior to emergence. Hafele and Roederer (1995) make this comment on adult little yellows: "Look for the females on warm summer evenings when they frequently form large swarms over riffles and runs to lay their eggs. As they gently glide to the water's surface, trout wait below, eager to intercept them."

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Dr. Clarke Garry, of River Falls, WI, is a professor of biology at the University of Wisconsin – River Falls. This article is one of a continuing series on the aquatic fauna of the Kinnickinnic by Dr. Garry.

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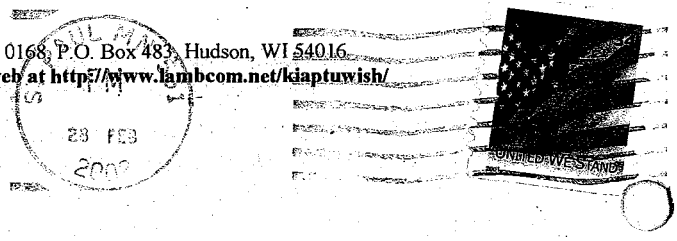

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Gary Horvath	715-425-8489
Kent Johnson	715-386-5299
Craig Aschenbrenner	715-381-7242
John Koch	715-684-2228
Bill Lovegren	651-645-0565
Ted Mackmiller	715-549-6771
RIPRAP EDITOR:	
Jon Jacobs	715-386-7822

MEETING AND PROGRAM SCHEDULE:

MARCH 6: Annual Business Meeting

APRIL 3: Dick Frantes Memorial Fly Tying Extravaganza

MAY 1: WiDNR on local conservation issues

JULY: DATE, PLACE AND TIME TBA

DEADLINE FOR APRIL RIPRAP: FRIDAY, MARCH 23.