

President's Lines

Kiap-TU-Wish capped off 2000 with another fine Banquet. Thank you contributors and attendees. A special thanks to Tom Helgeson for providing our program, Steve Parry for soliciting auction items, and Jon Jacobs and Mike Alwin for bringing it all together again this year. Our chapter cannot succeed without volunteerism for events like these. Thank you, gentlemen, from all us in our chapter, for your commitment and volunteerism that makes this chapter go year after year.

I think that if you talk to these folks, they will tell you it doesn't take a whole heck of a lot of effort to pull off this kind of event. But just taking a little baby step towards ownership of an event or idea is a lot for some folks. I challenge the entire membership to take one little baby step towards volunteerism this coming year.

Giving just a little can mean a whole heck of a lot to a volunteer organization like TU. Watch for "job openings" (officers or other) in the next RipRap as my term as President comes to a close in March.

See you on the Kinni Brushing Project days.

*Tight lines,
Brent Sittlow, President*

Western Wisconsin Trout

Habitat:

On January 16th, Kiap-TU-Wish will be meeting with Ojibseau Chapter and DNR Trout and Fishery Managers to discuss past and future project work in our area. If you are interested in attending this meeting, or have some input on possible project areas, please contact Brent Sittlow or John Koch. These types of meetings are always interesting. Project implementation can take a lot of elbow grease and physically demanding work. But often times, the hardest aspects of habitat projects are legwork and coordination activities. A lot of time and effort goes into making plans and setting stage, whether it be budgets, landowner easements, equipment, personnel, scheduling, etc. Meetings like these offer a lot of insight on how projects are born and grow. It is interesting stuff. Please consider becoming involved.

New Richmond Dam in "Flux"

By Brent Sittlow and Ted Mackmiller

Flow fluctuation issues noticed by Kiap-TU-Wish chapter, anglers, citizens, and other recreationists have finally been acknowledged. In October, the Wisconsin DNR placed flow monitors above and below the New Richmond City Impoundment on the Willow River and documented a cyclical flow fluctuation phenomenon below the impoundment. The first hypothesis was a dirty or scummed transducer that measures flow and signals adjustments to the automatic gate operation. Cleaning the transducer produced no improvement. After further analysis of the dam's operation, DNR personnel determined that at a flow of 50 cfs or lower, the automatic gate system isn't engineered to react precisely enough to maintain a "run of the river" regime. Future plans for improvement may mean making one of the three gates a more static and less dynamic. This will hopefully mean less wear and tear on the dam, and better flows for the lower river system. Kiap-TU-Wish will continue to monitor this situation.

State Council Banquet Feb 3rd in Oshkosh

Wisconsin State Council of Trout Unlimited 16th Annual Conservation Awards Banquet will be held Saturday, Feb 3, 2001 at the Park Plaza Hotel in Oshkosh, Wisconsin. Look for this announcement and ticket order forms in an upcoming issue of WisTrout. It is important for our chapter and all Wisconsin Chapters to support this

banquet and attend the annual meeting. The Wisconsin State Council plays a very important role in many issues of statewide significance. And you will be very hard pressed to find a better or harder hitting publication on environmental and cold water issues than WisTrout. Your support can include attendance, donation, participation, or cash. Please contact Brent Sittlow if you are interested in supporting this banquet.

Paul Wiemerslage Takes Us West

Chapter member and veteran traveler Paul Wiemerslage, in keeping with the travel theme of this issue, will take us on a tour of both the famous and little known quality waters of British Columbia, Alberta and Montana at our January meeting. As always, it's the first Wednesday of the month, in this case January 3. The place is the JR Ranch, I-94 and U.S. 12, Exit 4 east of Hudson. Join us for dinner at 6:30PM, please, and for the meeting at 8PM.

Winter Projects Resume!!!

We resume our schedule of winter work days, a cooperative effort with the WIDNR, on Saturday, January 13 at 9AM. Four more Saturday work sessions are scheduled: January 27, February 10, February 24 and March 10. The first session will have us working on the Kinnickinnic River at County Road JJ. This location is near the the intersection of County JJ and County J. This is the same area where the chapter finished up last year. Remember to dress warmly and to bring a lunch. As always, the Kiap-TU-Wish "Rule of Minus Twenty" applies, that is, we don't work, if according to the WCCO-AM meteorologists, the actual air temperature or the windchill is -20 degrees Fahrenheit or colder at that station's 8AM weather report.

You may contact John Koch or Brent Sittlow for further information, or better yet, come to the January meeting and get details there. These winter projects are the glue that cements our chapter together and are the primary means for every chapter member to contribute to the betterment of the trout fishing resource in western Wisconsin. There is work for everyone at these sessions; you needn't have experience with a chainsaw to help out, just a willingness to pitch in where you're needed.

What a long, strange trip it's

been*

*From *Truckin'* by the Grateful Dead

Editorial by Jon Jacobs

When I was a boy, my family lived on a farm in northeast Iowa. When I look back on it now, we led an idyllic life, but at the time the endless corn and bean fields seemed pretty constraining. Every August, though, when the corn was past the need for cultivating and the oats had been harvested, but before the soy beans were ripe, my parents would pile fishing gear, cooking utensils, clothes, food, my sisters and me into the family Plymouth and head north in the predawn hours. As we motored along, the cornfields gave way, first to oak savanna and then to a mix of dairy farms and second growth forest. At the end of a long day's drive there was a ramshackle rental cabin on the shore of a lake in Turtle Creek Township, Todd County, Minnesota. In the intervening forty-plus years, far too much of the modern age has inflicted itself on this area, but to me, then, it was an earthly paradise. The weather was usually stable, with high, blue skies, crisp nights and mornings and warm days. The late summer air, which bore an aroma of pine needles, birch trees and warmwater lake, was mesmerizing. Best of all, there were fish to be caught: Chunky largemouth bass, vicious northern pike and sunfish. Those sunfish were an ideal quarry for a boy who had a fly rod, but no clear grasp of how to use it. There were local characters, too, chief among them August Japp. In the twenty-first century we would regard August as a bibulous idler, but I worshipped him as if he were a reincarnation of both Daniel Boone and Davey Crockett. He could fell a tree with a double bit axe, smoke bullheads to perfection, paddle a canoe expertly and take bass with impunity with his bent and whippy bamboo fly rod.

Every year, for about a week after our return home, I would awaken to see my familiar bedroom walls, but would be shocked to find a back yard rather than a lake in the view out my window. Please don't misunderstand; there were some other, shorter trips to satisfy my need for adventure, too. A few times every summer, we would point the Plymouth toward Steamboat Rock, a tiny town on the Iowa River, where we would fish and picnic in a little park. In my memory this was a wild place, with banks lined with river rock beaches, clamshells and willow thickets in which I never failed to get lost. The water was even a little wild, too, with a downhill pace that produced long riffles, something distinctive on a prairie river.

There's a stretch along the Kinnickinnic River in River Falls' Glen Park that transports me back to those willow thickets along the Iowa every time I walk through it. For that matter, exploring the Kinnickinnic has been an adult adventure for me. Over the years I've walked and fished the length of the stream from the Kinnickinnic State Park to the Powell Dam in River Falls. Driven by a childlike curiosity to see what's around the next bend, I've seen some remarkable scenery and had some wonderful fishing. This, I think, is why we travel: To satisfy that childlike curiosity. My own fishing travels have been restricted to a small geographical area, but I treasure the time I've spent exploring the upper Midwest. From the trout streams of the coulee country to the smallmouth bass rivers of the northern forests to the steelhead tributaries of Lake Superior, it's obvious that I've traveled a long way in terms of experiences since my family left Iowa behind. Others among us have set out for the American West, the saltwater flats, the Antipodes, Canada, Russia or Alaska. In this issue, Allison Jacobs, writes well, despite the handicap of being my daughter, about the Black Hills of South Dakota. RipRap stalwart Mike Edgerly delivers a stream of consciousness, or perhaps more accurately in this case, a consciousness of stream essay on a peripatetic journey through America's trout Mecca, the Yellowstone country. Board member John Koch has a touching story about the value of local adventure. So, sit down, kick back, try to forget it's the dead of winter for a few minutes, and let's see what's around that next bend.

Getaway

by John Koch

Sliding through the nettles and head-high grass, slipping silently into the creek, I am torn with the familiar debate my mind goes through when fishing new water...

"They say there were fish here a couple years ago..."
"Maybe it would be better downstream..."
"Shouldn't you be at work...?"

Etc., etc.

My fears are compounded by cloudy water from the previous day's storm.

Why bother?
Doesn't the hallway need painting...?

The first cast upstream puts my fears and anxieties to rest as a flashing brook trout misses my Joe's Hopper and

picks up the Pink Squirrel on the way down. A quick release, the next cast, another fish. I fall into a steady rhythm of casting, hooking and releasing trout.

To keep me honest and humble, the wind grabs my rig and places it from time to time into the brush surrounding the creek above my head. Sometimes I retrieve successfully, more often I do not.

I continue to catch and release brook trout, brilliant in their pre-spawn colors. From time to time I hook a creek chub. At first annoyed, I start to wonder: which is the better quarry – the beautiful brookies that I catch with wild abandon, or the lowly chub that is apparently a bit more difficult to catch? If I were blind, would it make much of a difference? Hmmm...

I suddenly realize I'm in the middle of the big silence: I sit and watch a fox squirrel wander down to the creek and take a drink. I listen, and quiet rolls down over me like a mist, louder and more profound than any sermon.

More casting, more trout.

I had spent the morning in the hospital, visiting my father, victim of a stroke that left him with a useless right hand and impaired speech. Far from the aseptic environment I had left that morning, I fish now with the ghost of my father's youth, watching the flash of his Heddon in the sunlight, hearing the scream of his old Perrine Automatic break the big quiet.

A flock of ducks explodes from the next pool as I quietly round the corner, putting down almost any thought of fishing the likely looking riffle flowing into it. Almost any thought... the third or fourth cast starts the cycle all over again with a fine, fat brook trout taking the dropper nymph.

I spend the better part of an afternoon caught in this exquisite pattern. Finally, it's time to go; some thing, somewhere, says that it's been fun, but it's time to leave. The fish are still eager to slap my fly off the surface of the water, nightfall is still hours away, but I've had enough. I stumble out to the dirt road with the not too pleasant thought of walking all the distance back to my car (it feels as though it should be miles and miles away). I am greeted with the happy site of my trusty blue bomb not 500 yards down the road.

John Koch is a Kiap-TU-Wish board member and a fishing guide in his native Wisconsin.

Postcard from the Edge **Road Warrior**

By Mike Edgerly

Home waters are never enough, of course. Destination angling is built on the notion that one's trout and streams are less interesting than those one day's drive or more from home. I suppose the other allure of getting way out of town for trout has something to do with testing one's skills against more difficult fish in more challenging environments. Still I like to think that angling on the road is not so complex as that. Like Sigmund Freud said, "Sometimes a cigar is just a cigar". Sometimes an angling vacation is just a vacation.

Last summer I drove out of St. Paul on my wife's birthday, July 12, for ten days camping and fishing in the Rocky Mountains, a vacation that had been delayed by family health problems and work. (Really, leaving town on her birthday was no problem. I mean it. Really.) My drive from Minnesota took me across North Dakota, to Livingston, Montana and south to the town of Gardiner. I drove through Yellowstone National Park to the town of West Yellowstone and arrived at the airport three minutes after my fishing partner's plane disgorged him and lots of other anglers.

We hit the road and began eight days of good fishing, gorgeous scenery, pleasant weather and no arguments.

We fished the Madison River below Quake Lake and spotted some enormous fish and landed some of their smaller brethren. We floated the South Fork of the Snake with a guide, whom we tipped one dollar for each trout we hooked during our eight hours on the water. We tipped him \$75 dollars. We fished the Henry's Fork on our own and landed only a few small rainbows. We fished the Yellowstone River in the park two days after the season opener. Fishing dry flies almost exclusively, we hooked and landed many fine cutthroat trout, some of which still bore bright spawning colors and we avoided the scores of anglers who don't venture far from the Grand Loop road as it parallels the river for miles below Yellowstone Lake.

Early on a sunny Friday morning, I drop my friend at the West Yellowstone airport for his flight home to Kentucky. This is supposed to be the end of my vacation. Point the truck toward Minnesota, get home and mow the grass. But vacation is freedom and work is three days away.

I pull the truck to the shoulder of the road and consult my copy of **Fishing Yellowstone Waters** by Charlie Brooks.

Brooks said that driving along Highway 191, you see the Gallatin River emerge from its high headwaters in Yellowstone Park to the east and that good meadow fishing begins at about mile marker 22. At mile marker 23, I park in a turnout. There are no other cars in sight. I howdy with some bicyclists, nibble some crackers and peanut butter, drink a quart of water and rig up. It feels natural to be in harness again.

The sky is clear and the sun is hot as I walk downstream through the knee high grass and sagebrush. Here two creeks flow to the Gallatin, giving it some real flow, pushing it hard against banks and down riffles into smooth runs. Brooks wrote that on the Gallatin, as on the Yellowstone and other rivers in the national park, a 100-yard walk from the road would put you into water rarely fished by the casual angler. I walk 200 yards, spin about and begin firing a big dry fly upstream.

No risers or takes. The water feels flat, but looks fishy. And then I realize where I am, or more precisely, where I'm NOT. This isn't the brawling Madison or the verdant Yellowstone River with its steady summer hatches of insects and hungry post-spawn trout. This could be midday on the Kinnickinnic or the Rush or the South Branch of the Root River. In this valley, it is a narrow winding stream with lots of good holding water but no visibly feeding trout. The river says, "The sun is high and these trout aren't going near the surface; nymph me." "No problem," I reply.

I tie on a small bead head nymph below a strike detector and begin fishing the deeper, slower water against the high grassy banks. The river is about 20 feet wide and I stand on a gravel bar on the inside of a run. I cast to the tail out of the choice water. On the second or third cast, I get tight to a fish. The fish and I are backlit by the sun and I see it bulldog along the bottom.

The fish puts a nice bend in the 4-weight rod. I beach 16 inches of perfectly healthy and strong Montana whitefish. I release it, my reputation for attracting the less popular game species intact. I recall what our guide on the South Fork of the Snake said: Whitefish hold at the bottom of a run, while the trout are at the top. I move higher up in the run and find trout and hook and land four. The best fish is a rainbow of about 16 inches and maybe two pounds of silver with bright red streaks. There's no chance of a photo or even the net. In seconds the trout is hooked, then running and airborne, then in the shallows and gone.

I walk back to the truck and take a last long look around. To the east and west, mountains and pines frame the valley and the sun is high in the sky. There is still time for new water. Charlie Brooks' suggests fishing the bigger and faster water of the Gallatin River in the canyon north of mile marker 49. Trucks and cars are parked at almost every turn out. I whip the truck into one where two anglers have walked out and are piling into a camper. The fish are hungry, the anglers say, and they are in the middle of the fast current. Fish nymphs, they say.

Well, they are right. The fish are hungry and holding in the pocket water of this rocky, plunging stream. My meandering meadow stream has turned into a raw mountain river pouring over large, slippery rocks. The Gallatin in the canyon passed for the Big Blackfoot River in the movie version of **A River Runs Through It**. I recall the scene where Brad Pitt, as the talented but troubled brother of Norman Maclean, hooks a fish and fights it downstream, at one point sinking below the surface. I stumble and slide out into the current, the anti-Maclean. I manage to hook and land one 12-inch brown trout. I make a few more casts, but I'm ready to move on. This is a morning river, one to be fished after a good night's rest and a big breakfast. Back at the truck, grasshoppers click along in the tall weeds, brown and baked by the sun and the high desert climate. Was that a rattlesnake or a hopper along the path?

I point the truck toward St. Paul. Out of Bozeman, I drive east where the highway cleaves the mountains. The interstate is crowded with weekend traffic and my impulse to exit at Livingston and camp along the lower Yellowstone River fades. I gas up in Big Timber. North of town the Crazy Mountains provide the backdrop as the Yellowstone flows on its journey to the Missouri. South of town a road follows the Boulder River upstream. My newly made plans for an all night drive to St. Paul take a detour and I drive in search of new water.

The narrow road out of Big Timber passes between working farms and ranches. Irrigation workers tend to head gates and farmers point machinery toward home in the early evening light. The Boulder River is visible east of the road where it peaks from the cottonwoods. I see no access to the river, which is barred to the angler by fancy log homes with satellite dishes and No Trespassing signs.

I come to a bridge crossing, park and put on the gear. The river is named accurately. The Boulder is a big river running fast over boulders no smaller than bowling balls. I step into the current and cast. Squadrons of caddis swarm over the surface of the water, but I see no fish and hook

none. A typical bridge access; the fish here probably get pounded.

I stow the rod loaded and drive upstream in my waders. Thomas McGuane's ranch is somewhere around here. Like that would do me any good at 7 on a Friday night. Can't you just picture it: World-class author and angler sits down to dinner with his wife and some famous folk after a day of trouting or riding. There's a knock at the door. It's me, sweating in my waders, sunglasses and ball cap. Remember me from St. Paul? Here I am and I need trout and a cold beverage. Right.

I drive on and the Absaroka Range flanking the eastern edge of Yellowstone Park appears ahead. A day of driving and I'm still at the national park. A few miles on, I see what I've been looking for: A state of Montana fishing access sign, at the junction of the Boulder and West Boulder rivers. The access road bears left down to the main river. Opposite the access is a drive leading to a ranch. It's the first place I've seen without a No Trespassing sign. The living quarters and ranch buildings are situated behind a low hill and empty stables. The name of the ranch is a familiar one. It's Tom McGuane's place.

I'm stopped in the middle of the road. A new stream lies to my left. The home of my literary and angling hero lies to the right. I go fishing.

A trail to the river winds through tall, thick cottonwoods and over a barbed wire fence. I wade in and find trout rising to caddis. I hook and land a couple of 12-inch browns on elk hair caddis. Upstream the mountains are orange in the fading sun.

I'm done. It's time to go home.

Back at the truck, a young couple rigs up for some evening fishing. They are from Bozeman and are here for the weekend. He grew up near the Bighorn River, but fished the Boulder River as a kid with his father. She's pretty and friendly and looks good in her blue neoprene waders. She notices my Minnesota plates and asks what brings me to Montana. I lean my head back and with a beer in one hand and my fly rod in the other, I lift my arms in a silent gesture to the evening sky and the mountains and the rivers and the trout that says, "All of this brought me here."

Sometimes a vacation is more than just a vacation.

Mike Edgerly, of St. Paul, MN is the managing editor of Minnesota Public Radio news.

Fishing the Paha Sapa

By Allison Jacobs

I've been fishing with my dad ever since I was a little girl. I started fishing with a Snoopy pole and finally graduated to a fly rod. One of the first years that I used a fly rod, my mom and dad decided that we would take a vacation to South Dakota. Well, that summer vacation turned into an annual event, and we went every year for five years.

The drive to Spearfish, South Dakota, is a long one: almost thirteen hours. Due to the change to Mountain Time, however, the trip is easily accomplished in a day. The past few years for a week in June we have stayed at the small cabin camp of Wickiup Village. Wickiup Village is located a few miles out of the town of Spearfish at Cheyenne Crossing. The only other establishment near Wickiup is the Cheyenne Crossing General Store. It is a combination grocery store, gas station, souvenir shop, and restaurant. The store is located directly across from Wickiup. Most of the cabins at Wickiup Village date back to the 1930s, though a few are more modern. The cabin that my family stays in, Pioneer, is a one-room log cabin with a sleeping porch. By reading the signatures on the ceiling of the porch, I have determined that the cabin dates back to approximately 1936, though this date may not be too accurate because the ceiling also claims that Abraham Lincoln visited in 1947.

I would describe the weather in the Black Hills as very nearly perfect. The mountain air is warm during the day, but rarely humid. At night, the temperature cools down enough so that it's necessary to run the cabin's gas fireplace. Icebox Canyon, which intersects Spearfish Canyon at Cheyenne Crossing, is called that for a reason. I know this better than my parents because I am the one who uses the sleeping porch. Though it's cold, I don't mind much because I love the smell of the night air and lifting up the heavy canvas curtain to peek out at the bright stars. The stars in Spearfish are like nothing I have ever seen anywhere else. You can see all the stars that are drowned out by light pollution in cities, and some of the planets are even visible.

Another great thing about the Spearfish Canyon area of the Black Hills is the fishing. There are many small creeks teeming with trout. One of these creeks, Spearfish Creek, runs right through Wickiup Village. At this particular point in the creek there are a very few very wary trout. If you move up or down the canyon just a bit, however, there are many fish to be caught. My dad likes to fish the small, clear ponds located within walking distance of the cabins. These clear, glass-like ponds offer a formidable challenge

for any angler. I prefer to fish Spearfish Creek itself or another creek, Whitewood Creek. Whitewood Creek runs through a pasture, by a long-abandoned shanty house, and through a grove of small trees. It was in a pocket by one of these trees that I lost the biggest fish I ever hooked in the Hills. I even had my dad chasing after it with his net. The truth is, I think he was more upset than I was over the loss of that beautiful trout.

Fishing and vacationing in South Dakota has been a wonderful experience for me. Part of that experience has been introducing two of my friends to fly fishing and the Black Hills. Both friends enjoyed fishing and even caught fish on their own. I can't think of a better place to teach someone how to fly fish because the fishing can be easy, but the Hills are also an ideal place for the more experienced angler who could easily find more challenging spots to fish. My travels to the Black Hills of South Dakota have created many lasting memories, and I hope my friends have the same feelings about our trips. We weren't able to make the trip this year, and I missed it. I hope that I will be able to return to the Hills next summer to fish and experience all the other wonderful things that accompany my family's summer trip.

Allison Jacobs is a junior at Hudson High School in Hudson, WI.

The Naked Caddis

Clarke Garry

Pick up almost any rock from the bottom of the Kinni and one will discover a dark, olive-green, worm-like creature crawling on the underside. This larva could be any of several species of net-spinning caddisfly immatures. What makes these larvae especially noteworthy, beyond their obvious numbers, is that they lack the case typical of the majority of caddis species. Net-spinners are members of the order Trichoptera, family Hydropsychidae. The family name translates from its Greek origins as "water spirit," although some translations would have it as "water butterfly."

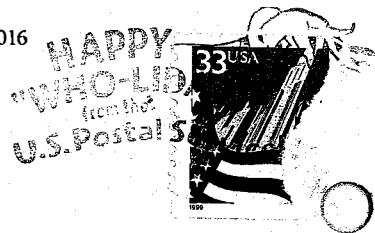
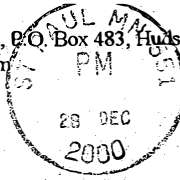
The net-spinners account for four of the 20 known species of caddisflies in the Kinnickinnic River. The most common of the 1272 hydropsychid specimens collected in my 1999 Kinnickinnic benthic inventory were: *Ceratopsyche slossonae* (33% of total caddisfly larvae collected), *Ceratopsyche alhedra* (22%), and *Ceratopsyche alternans* (4%). [For quantitative comparison the next most common kind of caddis collected in the inventory was the humpless casemaker, *Brachycentrus occidentalis*, representing an additional 23% of the Trichoptera.] *C. alhedra* and *C. alternans* tolerate water with only the slightest organic

enrichment; these have tolerance values of 3 (based on a ten point scale, 0=excellent, 10=very poor) (Hilsenhoff 1987). *C. slossonae* (tolerance value = 4) can apparently survive in streams with moderate amounts of organic matter. And that brings up a very interesting point. Based on the 1999 dataset, *C. slossonae* is found in the Kinni from Kinnickinnic State Park and 15 of 16 additional evenly-spaced collection sites ending just north of I-94. Collection records of *C. alhedra* and *C. alternans* begin in the park and progress upstream only as far as Site 9 (Quarry Road bridge area). One must be cautious with negative data, but no collections of the latter two species have yet been made in the 8 sites upstream from this point. This distribution pattern has similar examples in certain mayflies and stoneflies.

Take a closer look at these larvae and one sees a strongly curving body with three pairs of thoracic legs and a pair of prolegs on the last abdominal segment. The prolegs have a distinctive tuft of hairs arising from them. Each of the three thoracic segments is covered dorsally with a dark, protective plate, a characteristic, along with numerous branched, ventral, thoracic and abdominal gills, that separates this caddisfly family (in the larval stage) from others.

The three common species of net-spinners can be separated from each other by various patterns of light markings on the brown background of the head capsule. *C. slossonae* can be very distinctive with a single median yellow spot on its head. However, some of them (the "dark form" of *C. slossonae*) have a uniformly dark head as pointed out to me by Guenter Schuster and David Etnier, two well-known hydropsychid authorities, at the 1999 North American Benthological Society Meeting last year, when I showed them an array of Kinni net-spinners. *C. alhedra* is distinctive because of a pair of light patches in a side-by-side pattern midway down the front of the head. And *C. alternans* is a classic "checkerboard" species with numerous intermixed light and dark areas on the head.

These caddisflies construct a fine-meshed silken catchnet attached to a rock or piece of woody material and oriented to the current. This net functions to collect suspended organic food materials including debris, various invertebrates, algae, and diatoms (Scheffer and Wiggins 1986). Next to the net the larva lies concealed in a spun silken retreat, camouflaged with sand or organics, from which it exits to feed on filtered materials. The worm-like larval stage molts several times, progressively increasing in size. The pupa is then transformed to an adult within its reinforced retreat. Exiting from the case is the pharate adult (still in a pupal cover) heading for the surface to



emerge. This emergence behavior, and the return of the females to the water to lay eggs, make these life stages particularly vulnerable to feeding trout.

Dr. Ralph Holzenthal of the University of Minnesota estimates that any given watershed in Minnesota or Wisconsin may have 50 to 75 species of caddisflies, as determined by adult collections. Therein lies the key to further understanding this fauna, a systematic collection of adults. The author has an adult study planned for the Kinnickinnic Watershed based on portable UV (blacklight) attraction. This will, additionally, provide detailed emergence patterns that are not available from larval studies.

References:

Hilsenhoff, W. L. 1987. An improved biotic index of organic stream pollution. Great Lakes Entomologist 20:31-39.

Scheffer, P. W. and G. B. Wiggins. 1986. A systematic study of the Nearctic larvae of the *Hydropsyche morosa* group (Trichoptera: Hydropsychidae). Royal Ontario Museum, Life Sciences Miscellaneous Publications, 94 pp.

Dr. Clarke Garry is a professor of biology at UW-RF.

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MEETING AND PROGRAM SCHEDULE:

- JANUARY 3:** Paul Wiemerslage on Rivers of Alberta, British Columbia and Montana
- FEBRUARY 7:** Heith Benike, DNR, on Eau Galle Dam flow and temperature data.
- MARCH 7:** Business Meeting
- APRIL 4:** Fly Tiers
- MAY 2:** Rush River Survey Results

DEADLINE FOR FEBRUARY RIPRAP: JANUARY 26

THEME: TALES OF THE EARLY SEASON