

# RIP-RAP

Restoration, Improvement and Preservation Through Research and Projects

## Kiap-TU-Wish Chapter of Trout Unlimited

Editor: Craig Mason

## April, 1992

Layout: Andy Lamberson

## **MEETING NOTICE**

PLEASE NOTE THAT THE MEETING IS THE 1ST WEDNESDAY OF APRIL...APRIL 1ST NOT THE 8TH

(SORRY FOR THE ERROR IN PREVIOUS RIP-RAPS)

**Annual Fly Tiers Meeting** 

WHEN: WED., APRIL 1

TIME: DINNER AT 6:30 MTG AT 8:00

WHERE: HUDSON HOUSE

THIS MONTHS PROGRAM FEATURES THE

Jim Kojis Dan Gathje

Murry Humble Tom Muellner

Plus a few last minute guest tiers. Don't forget Dinner at 6:30 with our new special menu.

#### Wanted: New Members

The success of any organization is often dependant on getting new members, and Kiap-TU-Wish is no exception.

Gary Horvath has put his creative talents to work and has created a flyer that reviews T.U. and Kiap-TU-Wish that is perfect to give to someone who is contemplating joining.

These flyers will be available at our meetings and we would like for every member to take a few and put them in their vest. The next time you are talking to someone in the stream you'll be able to give them all the formation they will need to join T.U. and Kiap-TU-Wish.

The flyer will also be available at local fly shops or directly from any club officer or board member.

A Sure Sign of Spring

#### The Hendrickson Hatch

For us "note taking types" often one of our first entries in the major hatches is that of the Hendrickson. The "Dark Hendrickson" as it is also known, often starts hatching on Minnesota streams even before the season opener in April. Due to Wisconsin's relatively late opener in May, the Hendrickson hatch is often over or surely past it's peak by opening day.

Looking back through my notes, the hatch has typically come off in the mid afternoon, about 3 to 4pm. The hatch normally comes off on those "perfect looking runs" of relatively fast water. The fish feed heavily on size 14 Duns and my most productive flies have been a #14 Adams and a #14 Adams parachute. I've hit the spinners, a size 14 rusty spinner, only twice in the last 9 years. Once on the "Holy Waters" section of the Au Sable in Michigan and once on Trout Run south of Rochester, Mn. The action on Duns has always been fast and furious, lasting less than an hour, often only 20 or 30 minutes. There's no time for screw ups! The spinners have fallen an hour or so after the hatch right up to dark. The fish feed to what seems to be a sporadic fall. I fish a #14 Rusty spinner with hen tip wings.

I normally fish a 9 foot 5x leader, and if the fish suddenly get picky, I'll add 3 more feet of 6x. I typically fish either a 3 or 4wt rod which is perfect for the size flies and the size fish I normally catch!

Another tactic that I've found successful is to fish a size 12 or 14 hares ear for a few hours before I anticipate the hatch. The Hendrickson nymphs are known to be very active just before the hatch and I often catch my best fish with the nymph. Just be ready to switch to the Dun as soon as you see surface action. You would probably catch more and bigger fish staying with the nymph, but who can resist good dry fly fishing after the long cold winter?





"Eventually, all things merge into one and a river runs through it. The river was cut by the world's great flood and runs over rocks from the basement of time......I am haunted by waters". - Norman Maclean, A River Runs Through It.

I am haunted by waters, too, but happily so. I want rivers to be mysterious things, with deep, green pools and riffles sparkling like diamonds in the sun. I want their trout hidden in the undercuts, or in the crevices between rocks. I want to marvel at the springs that cool these rivers. I want to stand astounded at the bottom of a limestone canyon, looking up at ancient, remnant pines, trees that are a legacy of a time when the earth was a colder and more rugged place.

Still, one can admire these things as a mystic for only so long before rational thoughts intrude: Geologically, how did we come to be blessed with these rivers? How can two rivers, the Kinnickinnic and the Willow, be in close proximity and yet have remarkably different characters? How is it that the Kinnickinnic is nearly two different rivers; a meadow spring creek above its falls and a rocky canyon river below them? What are the dynamics of groundwater? How are human activities changing these watersheds?

I turned to the local library to look for geology texts that might answer these questions, but my search came up short. The texts were too general and too academically obtuse to be of much use to me. Fortunately, Dr. Sam Huffman of the University of Wisconsin-River Falls came to my rescue. The professor generously gave me an hour and a half of his time last fall and patiently answered my questions, some of which had to have been amusing to him at best and just plain strange at worst. I learned a good deal, thanks to the doctor's teaching abilities and I'd like to relate a little of that to you.

Saint Croix and Pierce counties sit at the edge of Wisconsin's Driftless Area, the region never covered by the glaciers that advanced over much of the upper midwest before retreating ten to twelve thousand years ago. Hudson lies very nearly at the exact edge of this glaciation. Geologic evidence suggests that the city may lie atop the ancient Willow River bed, a channel filled with material from the glacier's terminal morraine. The modern Willow cut its channel through this material. The lower Kinnickinnic, on the other hand, cuts its course through an unglaciated area. This explains much of the difference in the rivers' characters. The waters of the Willow run over a bed of glaciated sedimentary rocks in a channel lying in a wide flood plain. The Kinnickinnic , in its lower stretches, is a more youthful river, less meandered with a much narrower flood plain.

With the aplomb that only a truly ignorant person can muster, I asked Dr. Huffman this question: Why are the falls of the Kinnickinnic where they are? Amazingly, he smiled bemusedly for only a moment before explaining that a river's channel cuts downward until it reaches resistant material. It then flows onward until again finding erodable material, at which point it again cuts downward. The Kinnickinnic meanders through glacial soils in its upper stretches. These soils gradually thin until the river is flowing over bedrock. This is the point of the falls. On the Kinnickinnic, or on any river with a falls, the plunge point gradually moves upstream as the face of the falls finally give way to the force of the river. I conclude from this that when the first European settler with an engineering mind and sufficient financial wherewithal saw these falls, it was only a matter of time before they were lost behind a concrete apron that stabilized them and put the river's power to work.

I asked Dr. Huffman about the mechanics, or perhaps more accurately, the hydraulic principles of groundwater flow. He explained that as water soaks downward through the soil, it generates hydraulic pressure. This pressure is relieved in the form of upwelling ground water whenever the water table is intersected by a geologic feature such as a stream or lake bed. He cited as an example the slough that seeps water in to the Willow River west of Burkhardt. This is water forced upward by the pressure of the groundwater underlying the valley walls both to the north and south.

Dr. Huffman's area of expertise is groundwater and he provided me with more information on this subject than I could readily assimilate. I think I captured the basics of what he told me about the dynamics of groundwater in our area, though. Again, the geology of western Wisconsin is interesting. St. Croix county is roughly rectangular. To its immediate east, the Jordan sandstone is visible in the hills of Dunn county. Just inside St. Croix county, this formation begins to taper downward in the direction of the St. Croix River. It's covered, variously, with either glacially deposited materials or with Prairie du Chien dolomite (which is very similar to limestone). This covering ranges from a thickness of nearly nothing at the eastern end of the county to two hundred feet at the western end. Thus, underneath the county are two aquifers, a local one overlying the sandstone and a regional one in the sandstone. The local aquifer is relatively porous and water moves through it at the rate of perhaps a foot per day. The regional aquifer is much more dense and holds water that is at least centuries removed from the surface. In terms of water quality, the implications are obvious. Whatever we put in or on the soil is likely to become a component of local groundwater. Road salt, agricultural chemicals, septic tank effluents and other pollutants spread easily and rapidly through the local aquifer. There are a number of sinkholes surrounded by fractured limestone in the county's east side that send materials into the aquifer at a particularly intense level. One result of this relatively high porosity is that 15% of the county's private wells show elevated nitrate levels. This is certainly unpleasant news for country dwellers, but don't feel smug just because you live in a city with a deep well that taps the Jordan aquifer. Remember, groundwater moves rapidly through the local aquifer. This means that, if the sources of pollution were eliminated, the water would clean up fairly quickly. Conversely, recall that water in the deep aquifer is tens of centuries old. Imagine what would happen if a deep well were drilled improperly or if its outside casing failed. This puncture in the deep aquifer would allow pollutants to enter, essentially befouling the water for, well, forever!

There is evidence, too, that intensive water extraction from the deep aquifer can deplete it. Do you sense from this that we had better display much greater respect for our subterranean water resources?

Here are two final notes: You've surely noticed, as you traveled along Wisconsin's Highway 35 from I-94 toward River Falls, the rugged, domed hills scattered through the countryside. The next time you take this trip, you can tell your traveling companions that they are looking at hills comprised of St. Peter sandstone topped with Platteville dolomite. And those rocks from the basement of time along the lower Kinnickinnic? Time's basement, in this case, is about four hundred million years old, give or take a couple of million years.

Jon Jacobs

### **Electro**"Fishing"

Don't forget to save some time to participate in this years work with the DNR "electrofishing" the lower Kinni and the Willow River. As part of the new regulations on these streams, the DNR shocked the rivers before the new regs went into effect and will shock the river at scheduled intervals to access the value of the new regs.

This is an experience well worth taking a vacation day for. Everyone who has ever shocked with the DNR all end the day in complete amazement!" Where are all those fish when I'm fishing this stretch??" It will make you wonder when you shock over 100 trout from one of your favorite runs, or what will become one of your favorite runs this year! The other amazing thing is where the fish are hiding. On the Kinni for example, there are hundreds of fish in the grass along the banks.

There are a number of different jobs depending on your lower back strength and intestinal fortitude. One guy pulls the skiff with normally 3 guys on the shockers. Behind each shocker is usually another "net man" and with the skiff is another person that helps get the fish into the tub. Marty Engel and another volunteer measure and clip fins. We normally rotate to give everyone a chance to shock.

We start early and finish late, so bring a lunch and wear enough clothes to stay warm and dry. Chest waders are mandatory.

We will have a sign up sheet at the Chapter meeting in April. So put at least one day on your schedule. You'll enjoy it! Tentative dates are April 13-16 for the Willow and 20-23 for the Lower Kinni.

Kiap-TU-Wish President: Andy Lamberson (715)386-7568 Vice President: Kent Johnson (715)386-5299 Secretary: Don Ausemus (612)636-0625 Treasurer: Vern-Alberts- (612)451-1006 ----**BOARD OF DIRECTORS:** 1 Jon Jacobs (715)386-7822 Kent Johnson (715)386-5299 Gary Horvath (715)425-8489 Craig Mason (715)425-2282 Mike Alwin (612)439-8159 Skip James (612)436-1565 Note: April 1 **KIAP-TU-WISH** 1991-92 MEETING SCHEDULE **TROUT UNLIMITED April 1- Fly Tiers** P.O. BOX 483 May 6- Marty Engel Wisc. DNR HUDSON, WI. 54016 Dinner at 6:30 Meeting at 8:00 All Meetings are at the Hudson House