



Cross Currents

May 2013

**Regular Meeting for May
Bob Sappington on
"West Slope Cutthroats, Cheap and Easy"**

Upcoming Programs and Events:

Saturday May 4th, 10am. Bennett Spring State Park, Jerry Case Memorial Access dedication, hatchery tour and picnic. Contact Dean Rapp at 573-268-5050 or dean.rapp@gmail.com if you plan on attending.

Tuesday May 7th, 7pm. Regular meeting at Jack's Gourmet. Bob Sappington on "West Slope Cutthroats, Cheap and Easy"; the Coeur D'Alene River in Idaho

Tuesday June 4th, Hot Dog BURN at Gordon Shelter, Stephens Lake Park, 5:30. Hot dogs provided. Please bring a side dish.

Saturday June 15, 8am-4pm, BioBlitz and Stream Clean-up at Mill Creek. Help science teams collect data on natural communities. Contact John Wenzlick at 573-821-6813 or jdwenzlick@embarqmail.com for more information.

Receive a 10% discount from Woolly Bugger Fly Co. in St Louis. At check out use code MMTU at www.woolybuggerflyco.com. They donate money to Project Healing waters.

Next newsletter is for September.

Tip of the Month

If you have been tying flies for a while then you have probably accumulated a fair amount of material. I think it is as much a challenge to stay organized, as it is to try and tie that size 24 Adams. I've come up with a few tips and tricks over the years that I'd like to share with you.

Hook Storage - You will find a number of commercial hook containers on the market and

those will certainly work just fine. I've found most to be larger than necessary and a bit more than I'd like to pay to get organized. My solution was to use pill bottle storage containers that I found at the dollar store for, you guessed it, a buck. Each storage unit has 7 individual containers with 5 sub compartments each. If I have a hook longer than will fit I use my x-acto knife and remove a divider on two or more sub compartments. For smaller hooks I'll cut out a magnet like you'll see come with many hook packages and set it inside the sub compartment. A little labeling and my hooks are always in easy reach and easy to grab for a road trip or tying demo.

Chenille - The best way to organize chenille that I've found is the "Action Bag Floss-A-Way Organizer" which is a 3" * 5" set of bags held together with a set of book rings. You'll find this in the floss section of many of your local craft stores. I have a set for my large chenille, medium chenille, etc. etc. The floss organizer does not need to be limited to just chenille, you'll find I have most of my mallard feathers stuffed in these bags, I've used it for dubbing and many, many other materials. What I love most about this system is I can add or remove bags as my supply grows. And boy has it grown over the years.

Dubbing - I now have over 250 different types, colors, and textures of dubbing. Needless to say it might take me an hour if I had to go through the old shoebox looking for a particular one. I've just started using this trick and boy do I like it so far. You simply take a 3 ring binder, insert either business card holders or baseball card holders, punch a small hole in each compartment (I use a paper hole punch) and then insert your dubbing in each pocket. The small hole can be used to extract the dubbing and you can label and index to your heart's content. I've used the same setup for my v-rib and similar products.

Well that concludes this month's tip! I have a few more storage tricks up my sleeve that I may just

share with you next month. In the mean time if you have come up with a crafty way of storing your materials please let me know. E-Mail me at Dean.Rapp@gmail.com.

Brook trout, a biological control method for parasites of rainbow trout at Maramec Spring Hatchery.

Rainbow trout at Maramec Spring Hatchery have been infested with parasitic copepods, *Salmincola californiensis*, for many years. This parasite attaches to the mouth and gills of many different west coast species of trout and salmon. Like dog ticks in the mammalian world, the parasitic copepod is more of a pest than a disease on rainbow trout in the wild. This parasite poses no health concerns to the public and the fish are safe to eat. In trout hatcheries where fish are raised in high density conditions, the parasite can become very prolific and detrimental to the health of the trout. The copepods attach to the gills in such numbers that highly infected fish are weakened and may eventually suffocate. Weakened fish are also very susceptible to other diseases. From an angler's perspective, the fish may have so many parasites (which are visible to the naked eye), that they become aesthetically displeasing.

Currently there are no treatments approved by the U.S. Food and Drug Administration to control parasitic copepods. Several drug therapies are being tested, but may be years from approval. Brook trout may be an effective biological control method for managing parasitic copepods in the aquaculture industry. Using a biological pest control is more desirable than using chemicals that may affect the safety of a food item like fish. Biological control is nothing new to the farming industry -- some methods have been around for centuries. A common one in gardening is the use of ladybugs on roses to reduce aphid infestations. Brook trout seem to have a unique, but as-yet unknown, quality that may help control the parasite.

A study done at a fish hatchery in the State of California placed brook trout above rainbow trout in their water supply system and saw dramatic reductions in parasites in downstream rainbow trout being reared. The parasitic copepod has a free-swimming larvae stage that attaches to the fish host and completes its life cycle. When the eggs are released and hatch the larvae drift downstream until bumping into a potential host. Normally any trout downstream of the adult copepod are at risk of being infected. The brook trout are somehow filtering the copepod larvae from the water supply, but the mechanism is unknown. One theory is that the copepod, *Salmincola californiensis*, is specific only to western basin rainbow trout and cannot complete its

life cycle on a brook trout. The Missouri Department of Conservation is currently raising a small number of brook trout to test this theory and determine if this biological control technique has application to Missouri rainbows. There are no plans to release brook trout into the wild. They will be raised at Maramec Spring Hatchery and used in the hatchery pools as a filter to reduce the copepod infestation level in downstream raceways of rainbow trout being reared for release in the Meramec River and Maramec Trout Park. This population of brook trout will be used solely for the purpose of preventing infestation of rainbow trout. The long-term goal is to provide Missouri anglers with an even more healthy, vigorous, and attractive rainbow trout.

UPDATE:

Several phases of research have been completed during the two years since we initiated the study; we have answered many questions on rainbow trout and copepod interactions as well as generated many more. There is one more phase of the study to complete before we can conclude that brook trout do indeed reduce copepod infestations. The first year of the study included a growing year for the brook trout, which were obtained as eggs. During the first year, we found the biomass of the brook trout was far too low to offer any kind of copepod protection to downstream rainbows.

In phase 1, we collected some baseline information on rainbow trout and copepod infestation levels. For this phase we used "copepod catalysts" to assess infestation rates, older fish that had been in the system several years to initiate parasite exposure to the new fish. Within 2 months of exposure to the Maramec Spring water supply, 80% of the uninfected fish from Montauk Hatchery became positive for copepods. We observed the longer the fish stay in the raceway the infection level increases from 1 per fish to as many as 25 or more. We learned that some rainbows tend to have a resistance and stay clean while others, such as males in spawning season, are a copepod magnet.

As the brook trout grew larger we reached the recommended density level and could begin testing their effectiveness at preventing infection. In phase 2 of the study we removed the catalyst fish from the raceways and moved the brook trout to the first pool in the series. The only source of copepods in the water supply came from whatever fish may have been infested in the spring pool. The data from this phase showed that after 6 months of exposure copepod levels dropped down to less than 1% in the rainbow trout kept below the brook trout in the raceway series. On phase 3 we moved new rainbow trout into pool 1 and 3. Pool 2 was occupied by our brook trout to serve as the bio-filter. We were

surprised to discover that both pools of rainbows had a <1% infection rate after several months of exposure to copepods in the water supply. This data leads us to believe the copepod source in the spring pool was very low and it may take many months of exposure before the explosive infection as seen in phase 1 develops. Our last attempt to confirm effectiveness of the brook trout is to once again add catalyst fish to the first pool of rainbows. Here we hope to see that pool 1 will have a significantly higher infection rate than the rainbows downstream of the brook trout filter.

Of note in the two years of this study we have not seen a single adult copepod attached to a brook trout. Additionally, many brown trout were also examined for copepods and they too were copepod negative, presenting more evidence that the specific nature of this copepod is to use west slope salmonid as hosts. This also provides some indication that brown trout may serve the same function of the bio-filter as brook trout. Future efforts on a brown trout bio-filter are underway, with twenty thousand brown trout fingerlings being raised for this purpose.

CASTING CORNER ©2013 by Gary Eaton, FFF Master Casting Instructor - FRESHWATER FLY LINE - NEW ENTRIES IN THE LONG BELLY MARKET

Circulating in the fly fishing world, I run into lots of products before their release. This double-edged sword, puts my opinion in front of releases and sometimes I find myself reviewing things that never come to market or arrive in very different forms than the tested prototype. so, I enter into the *concept* realm in writing on long-belly fly lines, LBFLs.

The standard of all long-belly fly lines (LBFL) remains Scientific Anglers™ Expert Distance®. To date, no other line compares with this taper's seventy-five foot head, not even in the SA™ offerings. The previous caveat considered, the SA™ Mastery Textured Series™ Trout® comes as close as any and offers the added surface area of the *textured* or *dimpled* surface to increase working life, enhance float and release from the surface. This line still feels great every time I cast the sixty-nine foot head onto the water.

While at a casting event, I sampled the Cortland™ Trout Boss® in a pale yellow color. It cast beautifully on a Hardy™ Sintrix® rod. The Cortland web site

describes the belly as having a generous sixty-two foot head length. They also have a dedicated switch line with a fifty-seven foot head that might entice those using single-handed rods for water-anchored casts (switch & Spey) in a line weight lower than the rod rating.

Most intriguing among new LBFLs, the new AIRFLO™ SuperDRI® series seems poised to wake-up some polyurethane aficionados. Polyurethane represents a simpler molecule with more inherently stable properties across wider temperatures. Additionally, the polyurethane coating has no plasticizers and a surface that resists ultraviolet degradation - drying out and chemicals - think insect repellent and sunscreen resistance. AIRFLO™ evolved from the solid Kevlar cores that would coil in cold water and today offers a semi-braided, proprietary core that stretches only about six percent - PVC over nylon lines ordinarily stretch much more than that, around 25 percent. This only becomes a significant issue at long distances when pursuing active hook-sets on large, predatory and carnivorous species.

The profile of AIRFLO™, DistancePRO® fly line looks good but, I did not get a chance to cast the sample. The prototype displays an extremely slick surface that promises good shooting. The running line right behind the belly fades from the lemon-colored head to a gray zone that clearly has much less feel of stretch, smaller diameter and greater stiffness. I look forward to casting the fifty-six foot head on this 120-foot line when it becomes available in mid-May in ATMA line weights five through nine. The seventy-five dollar price tag may seem more tolerable when you discover AIRFLO™ offers a five-year, no-crack warranty.

So goes the round-up of LBFL entries. All carry competitive price tags in the seventy-five to eighty-five dollar range. The only true high-visibility line remains the SA™ Expert Distance® in the *competition orange* at 120-feet in length. I favor this for practice because it makes seeing the loop so much easier across all environmental light conditions, the head length over seventy-four feet also makes this enjoyable for roll-casting, switch rods, and single-handed Spey.

My instruction, alone, will not improve your fly casting; practicing well & often, that which you have learned, is required. - Gary Eaton, FFF Master Certified Casting Instructor - doubledok@gmail.com

Mid-Missouri Trout Unlimited
4625 E. Raccoon Ridge Dr.
Columbia, MO 65201

Mid-Missouri TU Chapter Officers for 2012-2014

President	Michael Riley	573-817-0631
Past President	Dean Rapp	573-268-5050
Vice-president	Scott Gerlt	573-875-2033
Secretary	Tony Warren	
Treasurer	John Meyer	
Membership	Jim Washabaugh	573-893-3807
Web Editor		
Member-at-large	open	
Banquet	John DeSpain	573-817-0631
Resource	open	
Program	Scott Gerlt	573-875-2033
Conservancy	Sam Potter	
	Bill Lamberson	
Newsletter Editor	Denis Hancock	573-442-3670 (home) 573-999-3848 (cell)

Cross Currents, the Mid-Missouri Chapter of Trout Unlimited newsletter, has a circulation of approximately 300. Regular chapter meetings are held on the first Tuesday of each month, except for July and August. The regular meeting place is the Wine Room at Jack's Gourmet Restaurant, located on East Business Loop I-70 across from the east side Westlakes Hardware in Columbia, MO. June meeting is at Bethel Park. Meeting time is at 7p.m., but come early to chat and eat. Board meeting before hand.

Internet: www.tu.org
www.midmotu.org
Email: rileym@missouri.edu
Newsletter: hancock.denis@gmail.com

One of our significant costs is printing and mailing this newsletter. If you are willing to accept it by email, more of MMTU monies can be spent on conservation. Just send your email to rileym@missouri.edu to make the switch.