

Three Year Tagging Study Underway

Please Release all Tagged Trout

By: Tim Clancy

If you can only remember one thing from this article, please, remember the headline above. **Release All Tagged Trout.** It's important for the success of this study.

This project came about as the result of some observations last summer that kept building in importance. I'm going to give a thumbnail sketch here because it's too involved to give it justice in this format. We'll get something more detailed on the new website where we want you to report your tagged trout. Hopefully most will be released, but we also need to hear about any fish that are kept, so report those tags also.

But first, this study is a co-operative effort with The Lake Hopatcong Commission (LHC), The Lake Hopatcong Foundation (LHF) and The Knee Deep Club (KDC). Each group contributing an equal portion to cover the cost of 1,000 brown trout all over 12 inches that will have numbered jaw tags. The study is geared to see if trout will still hold over and is to be conducted over three years. To more easily identify what year the trout were stocked, each year different colored tags will be used. For 2022 we'll be using blue tags.

The idea for this came about starting in mid June of last year. I received a couple of phone calls from good friend Lou Marcucci from his boat. Like myself Lou is also a former KDC President. He had caught three trout over two mornings while fishing between Omaha Beach and Elba Point. The reason Lou called was that trout in June are somewhat noteworthy. The trout start struggling with the warmer water and become less active and also anglers all start targeting other species like hybrid striped bass, walleye and large & small mouth bass. They all turn on as the trout start shutting down. But three trout by one fisherman over two summer mornings is a little unusual.

It prompted me to call around and I verified eight trout caught by five different anglers over a three day period between June 8th—10th. Still nothing extraordinary, we see some trout caught in the summer months most years. All of the trout were described as hearty and fought hard and ranged in size from 12+” to 14”. But the thing that jumped out to me was that six of the eight fish were brown trout. At a glance that would make sense because brown trout are more tolerant of the marginal conditions that exist during the summer months. But since Fish and Wildlife now only raises and stocks rainbow trout and only 400 of the 1,000 trout that KDC had stocked last year were brown trout, that makes those fish reports pretty significant. It means only 4% of the 10,000 plus trout stocked between F&W and KDC last year were brown trout. So when 4% of the trout stocked resulted in 75% of those caught over three days in June, well, that is just extraordinary. KDC stocked trout are always 12” or larger, while state stocked trout are significantly smaller. I was able to verify a few more summer caught trout, like Ed Mackin's 3 lb rainbow trout caught during the Striper Contest on July 10th! But the reality is with a lake this size no one has any idea what fish might be caught on any given day. Out of the numerous summer trout I was able to verify over the summer 60% were browns. One fish that, to me, showed some trout are absolutely holding over was when long time club member Jerry Suk landed a hearty robust 18” rainbow off of Betrand Island on August 25th!



The June and July fish were significant enough that I brought it to the attention of LHC at their August meeting and suggested that they form a committee to examine this. Jerry's August fish was just one more piece to the puzzle. At around that time I became aware that for the first time ever Princeton Hydro, the firm that does scientific analysis for LHC, had conducted their deep water sampling twice a month in 2021. It showed that the critical thermal stress period for trout, which we had always assumed lasted for several weeks, was likely just a two week period. At the committee meetings we first reviewed scientific literature on brown trout that clearly showed if the fish are of an adequate size they can better withstand that critical summer period that is actually much shorter than we felt when we only had monthly water sampling. Trout require a certain amount of dissolved oxygen and cooler temperatures than all the other fish species that exist in the lake. When trout are thermally stressed they may start feeding less and burn more energy than they gain and actually lose weight. That same thing can happen to trout in streams. If it's a prolonged period then the smaller fish will likely succumb because they have no energy reserves to rely on. If the thermal stress period is too long then even the larger trout may not survive unless they find some thermal refuge, such as underwater springs. The point of this study is to document whether trout, if they are of adequate size when stocked, can holdover year over year and grow large on the lake's abundant herring.

We don't know what the ultimate outcome of this study will be. But we need all anglers to participate. We need everyone to report any tagged trout they catch and if possible to include a photo of the fish with the tag in its mouth. Each tag will be stamped with a number

and year and do your best to report that number without harming the fish. It's a good idea to wet your hands before handling any fish you hope to release. The most important thing is to release all tagged fish. We understand that trout are good eating but there will be another 10,000+/- trout stocked by KDC and F & W. One thing we know is that any trout that winds up in a frying pan is not going to hold over.

We've made the reporting of your catch easy. You can go to LHCtrout.com and fill in the form and download a photo, or scan the QR code in this newsletter that will also take you there. Additionally the QR code will be on the dozens of signs that will be prominently placed around the lake where anglers will see them. Also the KDC website will have a link that will take you there. For tech challenged people like me there will be paper reporting forms at our weigh stations that can be mailed in.

What makes this effort different than anything in the past is that KDC has partnered with the two other significant lake based environmental groups, LHC and LHF. A grant has been applied for, to conduct weekly water quality sampling during the summer to clarify precisely how long that stressful period lasts. Additionally, the grant is seeking funding to identify underwater springs and other trout refuge like some of the streams that empty into the lake. To encourage people to participate, five \$100 Visa Gift Cards will be awarded from a random drawing of anglers who report their catches. The prizes will be available for each of the three years of the study and were generously donated by LiveTheLakeNJ.com What we need from you is to **Catch, Photo, Release and Report** all tagged trout that are caught. More information can be found at LHCtrout.com.