

Get The Lead Out!

by Alan Trees

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When I first thought of doing an article on dredging for lead, I was concerned that it would look bad for anglers, and cast a dark light on fishermen. I have been a salmon and steelhead angler for over 50 years, and a gold dredger for over 40 years. I do not want to tarnish the sport of fishing. Most environmental groups and the Environmental Protection Agency (EPA) have long been trying to end any activity that sportsmen enjoy in the outdoors, whether it is fishing, hunting, gem collecting, wood cutting, camping, and the list goes on.

I know this article can be a double-edged sword, but as far as I can see, gold dredging is the only activity happening in our rivers and streams that addresses the deep cleaning and recovery of toxic metals. The EPA has classified lead as a toxin.

It was only a few years ago the EPA and the Idaho Department of Environmental Quality (IDEQ) contacted me to help create a mercury recovery program grant. They mentioned to me on the phone, as well as in an e-mail, that "Idaho gold dredgers were the only ones on the front lines cleaning up toxic metals from streams and rivers." Keep in mind that in the same department in the same building, other officials are trying to shut down gold dredging in Idaho. It seems in the EPA and IDEQ, the left hand does not know what the right hand is doing. This controversy is best addressed in another article, so for now, I will stay on task to show positive aspects and address how to cleanup lost lead in the bottoms of our rivers and streams."

I want to cover four things—where to start your search, how to identify the best locations to find lead in our waterways, the best techniques and the proper equipment, and how to market the lead you recover.

There are many locations here in Idaho, as well as a number of other western states, that have tons of lead lost in the streams and riverbeds. I am sure that in 42 years of

gold diving I have recovered at least 3,000 pounds of lead. During my gold dredging, I have not only recovered and removed lead, but hundreds of pounds of mercury, old car parts, soft drink and beer cans, boat parts, glass, sunglasses, miles of fishing line and tons of other modern-day "artifacts."

Let's start out with a few guidelines that I incorporate when starting my lead recovery dredging.

First, locate a river that has been well used and is known for many years of fishing. I try to dredge where the water is most accessible. By working in these areas, you will be finding larger quantities of lead because the

quires the use of larger lead weights to get down to the best fishing. The average angler loses about 3-4 pounds of lead a year in larger bodies of water. If you are not familiar with the area, ask a fisherman where most anglers fish, or better yet, stop by during the salmon or steelhead season and take note of where the groups are fishing.

I like to wait until the salmon or steelhead season is over before dredging. This way, I won't interfere with others and usually the water is lower and warmer by then. I like to draw the least amount of attention as possible because most fishermen do not understand gold dredgers or the posi-



The author operating his dredge to recover lead at a popular fishing hole. (Inset) Lead weights trapped between two boulders.

fisherman are concentrated in these areas. If you just start out dredging in a river without considering the access issue, you will probably find lead but it will be in smaller quantities and much more scattered.

My favorite lead rivers are usually where many anglers fish for salmon or steelhead. This type of fishing re-

tive aspects of this activity.

Second, knowing where to look while underwater is very important in order to find the larger concentrations of lead. Any obstacles you see, such as tree limbs, submerged logs, old fencing, large boulders, or anything protruding from the river bottom, needs investigating. The first

day underwater, I found an old section of square wire fencing that had washed downriver during flooding. It had 30 or 40 fishing lures of all kinds tangled in it. Some were red and blue spinners, orange spoons, and all kinds of secret weapons to outsmart the most weary salmon or steelhead. It looked like a bait shop wall and nearly every one of them had a large piece of lead hanging down from them.

I started dredging on the opposite side of the obstacle facing away from the shoreline. I've found that lead is usually tangled or lost on the far

bottoms.

Many times, I find very large accumulations of lead that have been building up for many years. In one such spot behind a large boulder, I recovered three-quarters of a 5-gallon bucket of lead in a two-foot area. This is not uncommon on most river bottoms. One of my favorite ways to spot hidden lead weights is to follow the line or strings. It seems that fishing line does not disintegrate for several years. Short pieces of string poking from the rocky and sandy bottoms can easily be followed to the lead weights. Not only do they lead you

When determining the right equipment for the job, there are several factors to consider: Am I in a gold-bearing river? Is the dredging season open? Is the location sensitive to dredging due to spawning areas? How deep is the water? Some rivers that I dive in are not gold-bearing rivers, and lead recovery would be my only interest. In this case, I would use my standard dredge, but slightly modify the riffles. Most riffle systems are a bit lower than I like, so instead of being perhaps three inches tall, I change the riffles to 1-1/8 inch tall with about a 70 degree "lean forward"



The author with lead recovered during six hours of dredging in a popular salmon fishing area. The total was 1,250 pounds of lead!

side of the obstacles. When the angler casts his line over these areas, line and lead often become entangled with the obstacle and will shear or break off. On my first dive, I began searching the river bottom to first pick up the easier lead that was recently lost. Oftentimes, the most recent season's lead weights are still visible and are protruding from the sand or stony

to the weights on the ends, but they lead you to a treasure chest of many pounds of lost lead that are hidden from sight.

It is a good idea to wear gloves and to beware of sharp hooks lost in the sandy bottoms. In my first two days of diving, I did not get stuck by a single hook. By being careful and going slow, you should be okay, too.

angle. Because most dredge manufacturers are trying to design the right riffle to keep larger stones from clogging the sluice box, the riffles are fairly short and the angle is closer to a 50 degree "lean forward" angle. With this type of standard riffle, lead can get to rolling and be flushed out.

I use a water blaster on my dredge to clear away sand, but the garden

hose type that we usually use for gold dredging does not work well for lead. It takes at least a one-inch hose with lots of volume to blast the sand away. If the season is open for gold dredging and gold is present, the basic dredge will do well. The main objective is to recover gold, and lead will be a secondary consideration. Due to the fact that the larger gold is deep in the overburden and the lead seems to be closer to the surface, your operation will be slowed down some just to recover lead.

When diving for lead in more sensitive areas, such as spawning beds or boat landings, I don't use my standard gold dredge. In these areas, I disassemble my dredge and remove my sluice box as well as my pump housing and impeller. This way the pump seal is not damaged from lack of water and the air compressor drive pulley is free to operate the air compressor. You may have to place a large rock or bucket of rocks on the pontoons to balance them out so it will sit level in the water. All you are interested in is the hookah diving system because the lead recovery will now be hands-on. Hand fanning, or any simple technique you are familiar with, will work fine. When lead diving in these areas, I use a 5-gallon bucket with the bottom cut out and a one-half-inch screen fitted into the bottom. I move this along with me as I pick the pieces of lead from the stream bed.

The depth of the water is important for obvious reasons. If the water is no more than 12-18 inches, then just a snorkel and mask will do fine. I am more comfortable using my hookah system. I feel I am more productive and less worried about breathing in a wave or splash of water with a snorkel.

There is another benefit of lead recovery besides the value of cleaning up the waterways from toxic metals. That would be your recovered lead! Lead is expensive to buy and easy to market or sell. When shopping at my local bait shop, I spend about \$7.00 for a 1-pound roll of 1/4-inch lead. I average about 600 pounds of lead in a 3-hour dive in a well fished Idaho river. Most fishermen would gladly pay \$2.50/pound for used lead. This is one-third the price of finished lead. They can melt down and re-cast the lead to the size and shape that meets their needs. If you do the math, it

equates to about \$1,500 of heavy metal value per three-hour dive. This is good wages, and you are doing a service to the environment by removing this toxic metal. I feel that gold divers are working hand-in-hand with the sport of fishing to minimize the effects of toxic metals.

Here is a situation that happened to me awhile back that every gold diver and angler alike can appreciate. I was fishing one morning for salmon from my boat in a fairly fast portion of the river. I was using my wife's special favorite recipe of salmon eggs with tuna in a bait ball to outsmart a wily Chinook salmon. All of a sudden my pole bent over and I was nearly yanked from the boat as I struggled to regain my balance, plant my feet, and get ready to drag in this monster. It went upstream, then caught a fast current, and down the river it went. I wrestled desperately to regain control. I could visualize in my mind that this was going to be an Idaho State record salmon—at least 40 pounds or more! All the bait shops and fishing stores—even Cabela's would have my picture plastered all over the front door.

After considering that I had only 18-pound test line, I knew I had to baby it. The slightest wrong move could end it all. I was attempting to keep my line tight, and I reached down with one hand and slowly retrieved the tape measure so I could be ready for the big event. It seemed like an hour long struggle, but I am sure the whole ordeal only lasted 7 or 8 minutes. Then, as I wrestled the giant creature closer to the boat, the monster seemed to be tiring. I readied my net in my left hand. SWOOP! I somehow managed to hoist the monster over the side and into the boat. I could not believe my eyes! It was a monster, alright! It was a 235-15 Michelin tire! This goes to show you, you never know what you will find lurking in the depths of our rivers and streams.

When you see a gold dredger, thank him for his efforts in cleaning up our streams and rivers. Thank a gold dredger for the removal of trash from our rivers and streams. Thank a gold dredger for creating a better environment for our fisheries. Thank a gold dredger because he or she is the only one on the front lines, ridding the streams and rivers of toxic metals and waste. Can you think of any

other program currently in place, by the EPA or any other environmental agency, that you can thank for their equal effort to clean and preserve our fisheries? ❌

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