



## Cleanliness is Next to Godliness, Part 2

by VINCENT T. PICA, II

Chief of Staff, First District, Southern Region (D1SR) United States Coast Guard Auxiliary



Way back in January 2007, we wrote about this topic with respect largely to the things we drop in the water (see SSP, "Cleanliness is Next to Godliness", January 24, 2007.)

But what about the things we bring out there, like our copper-oxide bottom paint? This column is about that.

### Painting with Poison

Yes, if you really think about it, we paint the bottoms of our boats with poison. Intentionally. We're trying to kill barnacles, algae, slime and other stowaways who can clog our intake valves, foul our running gear and, as a consequence, actually create another bio-hazard as we have to apply more power (meaning burning more fuel and creating more exhaust) to move the boat at a given speed. So, our intentions are not necessarily ignoble - but if we start to address some of the collateral damage, we can make them noble.

The history of the War of the Barnacles goes back to the Phoenicians. They used many substances - including lead and tar - to battle the speed-killing and weight-adding stowaways. It wasn't until the Romans realized that shields of battle work at sea too - and shielded their ships with copper sheathing - that something effective began to turn the battle in favor of the mariners. This technique lasted for millennia. History tells us that Nelson had an inherent 20% speed advantage over the Spaniards at the Battle of Trafalgar because of copper sheathing.

A lot of dangerous things don't reach the tipping point until there is a lot of something acting on the environment. By the 1950s, boating had begun to be

popular enough that scientists started to notice that shellfish were being affected by these bottom paints. This started the process that a half-century later is showing up in various alternatives.

### Two Pounds a Year

A 30' boat, painted with copper-oxide anti-fouling paint, leaches 2 pounds of copper into the waterways. Now, before you dry-dock your boat, scientists note that nature naturally leaches 250,000 tons of copper into the sea each year - compared to the ~15,000 tons that all the sea-going vessels add. But the ocean is one thing - a marina with 100 vessels closely packed is another. And that is the rub, sort to speak.

States and municipalities are starting to notice and taking action in two ways - restricting boat owners from using certain bottom paint mixtures and keeping marina owners from draining their waste water into the sea. Connecticut banned marina owners from doing so last year, requiring them to collect the water and bring it to a treatment plant. Sounds expensive, which just ends up in dockage fees or, worse, fees so high that boaters start to drop out... Eventually, the feds will bring a suit under the Clean Water Act and then the game is afoot.

But the regulators aren't just throwing (your) money at the problem. They are sponsoring "bake-offs" where boat owners and paint companies can try different formulas to address the issue. San Diego both passed a law that requires the amount of copper pollution in the Port of San Diego to be reduced by 75% in 15 years - and has created test beds for various formulas. And they have found

that not only are different chemicals effective (such as zinc) but also paints can be made more "slick" so those stowaways can grab a toe-hold (or whatever they hold on with!)

The paint companies haven't sat on their hands and have developed a number of alternatives - but getting approval from the EPA to add a chemical to the equation takes considerable time too. Will the solutions cost more? They already do and they will continue too. Not sure there is any way around that one...

### A Primer of Sorts

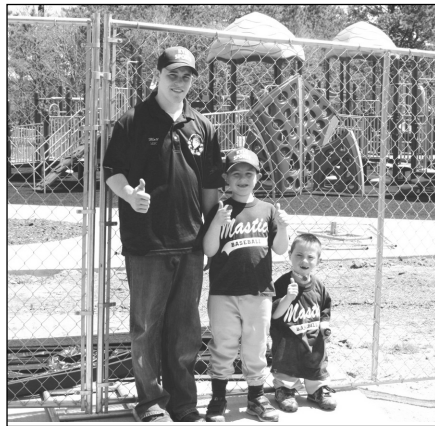
There is a lot of material out there and you can always discuss it with your dock master, who is certainly interested in the health of our waterways. The largest anti-fouling paint company, InterLux, maintains a lot of material online ([www.yachtpaint.com](http://www.yachtpaint.com).)

For the more scientifically inclined, the stowaways are not attaching to our boats for a ride. They attach to eat. When you put anything in water, tiny electrical charges develop. This was discovered by Johannes van der Waals 1873 (getting the Nobel Prize in 1910.) Via the "van der Waals" force, free-floating objects are attracted to the surface of that object. In waterways, these objects are decaying matter - a very attractive food source to our stowaways. The table is set. All it needs is hungry guests, which Mother Nature serves up readily.

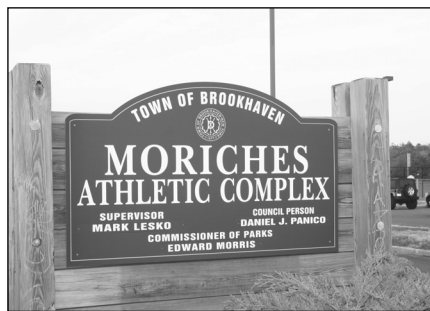
BTW, if you are interested in being part of USCG Forces, email me at [JoinUSCGAux@aol.com](mailto:JoinUSCGAux@aol.com) or go direct to the D1SR Human Resources department, who are in charge of new members matters, at DSO-HR and we will help you "get in this thing..."

## MSC Kyle Sports

On Saturday, we had a full day of sports for the MSC Kyle Sports. First, we had our tee ball game at 10:00am at the Shilrey Airport Field, then we went right to MSC Kyle Sports Saturday Program. We all wanted to see the progress of the Adaptive Playground at the Moriches Athletic Complex, and when Kyle saw it he had a huge smile was on his face. Kyle said now we play baseball, go Kyle Sports and come here and play on the playground. Children with special needs will now be able to participate and have a safe adaptive playground in the community so all children will be able to interact, socialize and yes, play. Please join us for our 3rd Annual MSC Kyle Sports Dinner Dance on June 5th at the Centereach Knights of Columbus Hall from 1-6 pm. All proceeds benefit the MSC Kyle Sports Programs and adaptive sporting equipment. Anyone interested in making a donation, please make all checks payable to The Mastic Sports Club & Kyle Sports, PO Box 225, Mastic, NY 11950.



Matt Metz, Keith & Kyle Meier all 2 give a Thumbs Up for the Adaptive Playground.

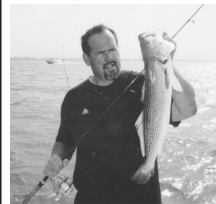


The Moriches Athletic Fields & MSC Kyle Sports Adaptive Playground

Debbie Metz  
Commissioner of Special Needs  
Mastic Sports Club

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## FISHING WITH TONY

### BASS, BLUES AND FLUKE ALL THERE FOR THE ASKING

by TONY SALERNO

The sudden influx of warmer air temperatures this past week have stirred our local Sound and ocean waters to warm considerably as well. As a result, striped bass, fluke and bluefish have decided to respond to the rising temps and are chowing down real well on both sides of the island.

Up along the North Shore, Candy Caraftis of Caraftis Fishing Station on Main Street in Port Jeff reports the fluke fishing is shaping up to what should materialize to become another banner season. The summer flatfish are really starting to pile up on all the local shoals from Smithtown Bay to Miller Place as they scour the shoals for tasty sand eels that grow more abundant in the area by the day. As the Long Island Sound water temps continue to rise, the spring run of sand lances, better known as sand eels will situate themselves upon the shoals where newly arrived fluke will be on their tails feasting on the tasty little morsels. As I pen this weeks column on Sunday night, plenty of short fluke and a handful of quality keepers are making their way aboard the area head and private boats off Mt. Sinai Harbor and the Nissequogue River.

For those looking to start the season with a budge of striper and bluefish action, you will not be disappointed applying your skills near Buoy 11 where the duo have produced solid action employing sandworms and fresh bunker chunks as well as tins and plugs.

Along the South Shore, the ocean waters between Moriches and Shinnecock Bays are teaming with fluke between 35 and 45 feet of water. While most fluke are a bit shy of the 20-1/2 inch limit, there are quite a few quality fish making their way into coolers as well. Inside both bays have also surrendered good steady action with a handful of keepers as well. In Moriches, the hot spot continues in Narrows Bay between Buoys 8 and 9; while west of the Ponquogue Bridge provide the bulk of the action at Shinnecock.

As for stripers, the action has been slow to start near the inlets. However, anglers tossing and slowly retrieving medium size swimming plugs are enjoying steady shots of bass to 36-inches along the back end of the bays. The Smith Point and Westhampton Bridges have been best during the evening hours, particularly during an outgoing tide. Bluefish are all over the bays slamming tins and spoons. Find the birds, and you'll find the bluefish.



Dan with a nice fluke caught aboard the Mt. Sinai based charter boat the Luw2Fish.