

SEASIDE CHAT

MEET LOUIS PASOZ AND LEONARD ARKINSTALL

MARINA DEBRIS HERDERS

LOUIS PASOZ AND LEONARD ARKINSTALL both love the water, and after spending enough time viewing the floating plastic and debris that plague many of California's harbors, each has chosen his own way of doing something about it.

Pasoz, a San Clemente resident, has been surfing for most of his life and took a job at 18 working at a Los Angeles County wastewater treatment facility.

One day, while having lunch with his wife at a restaurant at Long Beach's Rainbow Harbor, Pasoz watched workers clean up some debris from a section of the harbor, and shortly after, he witnessed debris gather in the same location.

"You could see the debris being brought in by the currents," Pasoz said. "I knew there had to be a better way to gather it and hold it."

After some drawings and a few prototypes, Pasoz came up with the Marina Trash Skimmer. Currently installed in marinas in San Diego, Long Beach and Dana Point, the skimmer has caught the attention of marina managers and water-quality experts.

Arkinstall, a longtime liveaboard at Alamitos Bay's Cerritos Bahia Marina, has taken a more hands-on approach to water quality, working as the volunteer "trash wrangler" for the San Gabriel River watershed. Over the past 15 years, Arkinstall has been operating a containment boom at the mouth of the river, corralling hundreds of tons of trash and debris before it has a chance to reach Alamitos Bay.

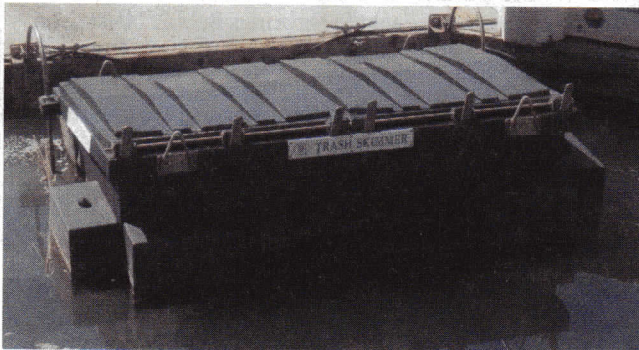
In an effort to get the most bang out of his boom, Arkinstall strategically deploys the boom in front of the nearby power plant, which circulates water for its cooling system, attracting large amounts of floating debris in the process.

"I don't like chasing trash; I like to get it where it collects," Arkinstall said.

Both Pasoz and Arkinstall demonstrate the power of the individual to make a change in the marine world.

SEA: Why did you get involved in marina cleaning?

PASOZ: My background is in wastewater treatment; I am a



Above: Louis Pasoz (left) and Lenny Arkinstall (right) work hard to keep California's marinas and waterways clean and trash-free. Bottom: The Marina Trash Skimmer, invented by Pasoz, removes floating debris in the water 24 hours a day, seven days a week.

California State Water Resources Control Board certified operator. As a surfer of 28 years, I have spent a lot of time looking at floating debris in the water and have always wanted to be part of the solution.

ARKINSTALL: Eighteen years ago, I volunteered and cleaned the Los Cerritos Wetlands of decades of storm runoff; it took six years. That is when I decided to see what can be done to control this unfortunate problem we have in our local waterways. The city took notice of my boom system 12 years ago and hired me as a consultant to maintain delicate habitats and waterways from the Los Angeles River to the San Gabriel River. That's how the Los Cerritos Wetland Stewards were formed.

What is a Marina Trash Skimmer? How does it work?

PASOZ: The Marina Trash Skimmer (MTS) is a floating container fastened to the side of a dock that circulates water through its system and traps floating debris inside seven days a week, 24 hours a day. Water oftentimes moves slower through marinas, allowing for debris to hang around and sink. This is why I believe this is the perfect place to remove the debris. The unit works by displacing water at a rate of 400 gallons per minute. Diffused air being introduced by the water pump keeps debris and plastics in suspension and, most important, adds needed oxygen to surrounding waters and oxidizes hydrocarbons (invisible pollutants).

How did you two meet?

ARKINSTALL: There were many systems and ideas kicked around over the years, and we wanted to try everything. Ten years ago, the city asked me to work with this guy who has a skimming device to collect debris from the harbors; that's when I met Louis. I found Louis to be a talented engineer and a guy who really cares about water quality. The city gave permission to Louis to install his device in our local harbors to do research and development and asked me to assist Louis in this project.

PASOZ: In creating and developing the Marina Trash Skimmer, I have met so many environmentally minded people like Lenny, marina managers, city personnel and so on. And one thing for sure is I never, ever, quit. So, hearing the story of Lenny and the difference he has made on water quality single handedly was an inspiration to me. I can only imagine what we can do together.

What makes the Marina Trash Skimmer different/better from other marina cleaning methods?

PASOZ: The skimmer works 24 hours a day, and its main purpose is to hold the debris until cleanup time. During a 24-hour period, debris usually travels around a marina until it is carried out to sea or it sinks to the seafloor, creating a different problem; accumulated sunken debris kills marine grasses and can end up costing millions in future dredging.

ARKINSTALL: I've noticed that when it's in operation, the quality of the water around the skimmer improved right away. It was exciting to see those 20 bags floating around end up in the skimmer. It was a good feeling knowing that through the night as we slept, the skimmer was working and getting all that floating debris.

What amount of debris are the skimmers capable of removing?

PASOZ: In the past 16 months, the units in operation have removed a whopping 87,000 gallons — or 522,000 pounds — of debris. That is plastic bags, cans, dead animals, old toys, bottles and so on. The skimmer also removes oil when absorbent pads are placed into the skimmer.

I'm not the strongest swimmer. Can I get sucked into a Marina Trash Skimmer?

PASOZ: No, the surface pulling action is fast, but the overall depth of the intake is 2 to 3 inches. Fish and any other animals can safely move around the skimmer without being sucked into the unit.

What can boaters do to work toward improved water quality in marinas?

PASOZ: Do not empty or pump out into the ocean, and keep trash in containers with a lid, so it does not fly away. I love the way Lenny has improvised a system at Cerritos Bahia Marina to handle pumpouts.

ARKINSTALL: We need to have more marine managers educate and enforce clean boating. It's the law. I do see a change in water quality as a new generation of environmentally friendly boaters is taking over, and all the efforts of municipalities doing their part to prevent storm runoff. Maybe one day I will be out of a job, and we can give back to the marine environment.

I lost a set of keys with a floaty attached to it. Any chance a Marina Trash Skimmer is holding onto them for me?

PASOZ: I'll have to look. I might find your keys along with the numerous tennis balls, teddy bears and any other floating thing you can imagine.

Ventura Harbor Boatyard

"Celebrating 25 Years of Excellence"



2 Travelifts, Professional Staff,
Quality Workmanship, Competitive Rates

FULL LINE OF MARINE SERVICES

Painting, Fiberglass, Gelcoat,
Sandblasting, Rigging, Mechanical,
Electrical, Welding, Wood Work,
Custom Stainless & Aluminum
Fabrication, On-Site Chandlery,
Shore Side Work Slips, Convenient Fuel Dock

(805) 654-1433

1415 Spinnaker Drive, Ventura, CA 93001

www.vhby.com

Haul Outs To 160 Tons



facebook.com/vhby