

Advanced Handling Methods for Invasive Species

by

Lions Beard Marine, LLC
of Maryland

Presenters

- John Masters, President
- Lorenzo Moore, Vice President and Chief Scientist

Statement of Purpose

Our products, in dealing with invasive species such as barnacles, zebra and quagga mussels specifically target the glues that are used to attach to a host surface. We transmute or erase the glue and the offender falls away from its host.

Further, no new glue can be secreted as it is absorbed immediately.

MAJOR ADVANTAGES

Does not kill the organism; it falls off alive!

Unit uses same power as a 40-watt light bulb

No Chemicals

No harm to water. Water remains potable

No harm to divers or others in water near unit

Known to have at least a 15 year life

Minimal maintenance

Small footprint and easily transported

Zebra Mussel Tests

- Massena, NY, St. Lawrence River & Grass River
- Results measured in 50 hours
- Zebras scraped with WalMart plastic spackle scraper
- Video at www.lionsbeard.com







Barnacle Testing 1.

- Jacksonville, FL on two barges
- Antenna attached directly to hull of barge
- Barges (2) measured 100' X 400'
- Half of the length grounded in mud
- Did not disturb oysters on barges (specific)
- Did not disturb paint on barge
- Test period was 65 days due to weather







Barnacle Testing 2.

- Cambridge, MD, at boat repair facility
- Antenna attached to “floater” device
- Signal reaches to 750 feet from unit placement. Barnacles easily scraped
- Testing takes 3 weeks
- Fish observed feeding on disturbed barnacles



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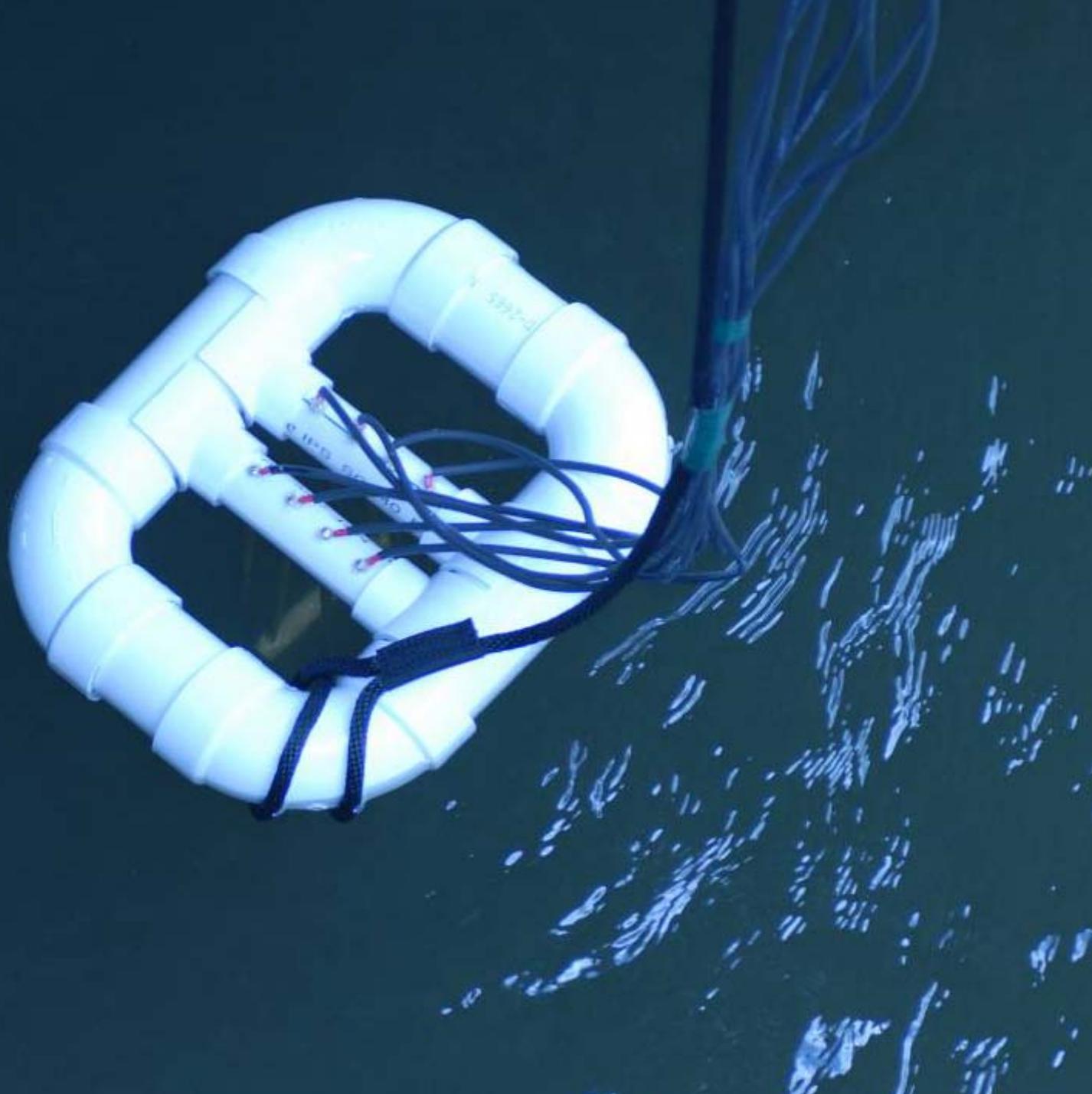
Barnacle Testing 3.

- Charleston, SC, alongside **SS Cape Chalmers**
- Divers clean 6' X 6' area and check findings at 30 day and 60 day intervals
- Diver says, "No growth in cleaned area."
- Contract observer notes, "We would normally have new growth in 5 days in these waters at this time of year."



CAPE CHALMERS

SECURITY NOTICE







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Next Steps

- Hollister, CA, San Justo Reservoir April 2011
- Closed for 3 years due to zebra mussels
- Tests to be conducted by USGS scientist
- www.nrm-sc.usgs.gov/staff/gross
- Scientific evaluation to be prepared by USGS
- Findings will be available on website without modification.



Thank you for your attention

- Q & A with Lorenzo Moore, Chief Scientist, with over 27 years of experience working with these products.