



FRANKLIN RAY SHIELD IV

CR Environmental, Inc., Dec. 2002 to 2005
2006-present subcontractor
Years with Other Firms: 5
TWIC card expires: 2018

USCG LICENSED CAPTAIN

**FISHERIES/MARINE MAMMAL OBSERVER
FISHERY BIOLOGIST**

AREAS OF SPECIALIZATION

- Licensed Vessel Captain
- Navigation/Survey Equipment Operation
- Marine Fisheries
- Coring/Sediment Sampling
- Logistics

EDUCATION

2013 First Aid/CPR/AED – American Red Cross
2007 USFWS certified Electroshock Fishing
2003 OSHA 40 hour Hazardous Waste Operations and Emergency Response Training, annual 8 hr refreshers
2003 USCG Captain's License 50 Gross Tons (May, 1, 2003), current license expires in 2018
2002 Alaska Marine Mammal Observer Training, North Pacific Observer Training Center, Anchorage, AK
1999 Northeast Fisheries Observer Program Training, Manomet Center for Conservation, Manomet Pt, MA
1997 Bachelor of Science, Marine Biology, minor: Oceanography, Old Dominion University, Norfolk, VA.
1993 Associate of Agriculture, Landscape Management. Virginia Polytechnic Institute, Blacksburg, VA

WORK HISTORY

2008-2009 NOAA NEFSC Multispecies Bottom Trawl Survey, Woods Hole, MA
2002- present CR Environmental, Inc., East Falmouth, MA
2002 Data Contractors Inc, NMFS Contract, Alaska Marine Mammal Observer Program, Kodiak, AK
1999-2002 Professional & Technical Services, Inc, NMFS Fisheries Observer Program, Woods Hole, MA
1999 J.C. Walker Bros. Clam Company, Willis Wharf, VA
1997-1999 Commercial Fisherman, F/V Casey Marie, Virginia Beach, VA
1993-1996 U.S. Fish and Wildlife Service, White Marsh, VA

SUMMARY OF PROFESSIONAL EXPERIENCE

Mr. Shield has worked with CR Environmental, Inc. since 2002 as an independent consultant and employee. His work encompasses surveys or sediment sampling of coastal embayments including a number of bathymetric surveys on the south shore of Cape Cod for the Massachusetts Estuaries Program's nutrient loading studies. He operates and maintains survey vessels from 14 to 32 feet, and conducts electrofishing, and vibracoring operations from Maine to Virginia.

Prior experience included working as a Marine Mammal Observer in remote areas of Kodiak Island National Wildlife Refuge, acting as Mid-Atlantic Area Coordinator & Fisheries Observer arranging observer deployments from New Jersey to North Carolina, and a Production Crew Supervisor for the nursery planting, maintenance and harvest of cultured hard clams, *Mercenaria mercenaria*. Earlier as a Biological Technician, for the US Fish and Wildlife Service in White Marsh, VA and the Nature Conservancy at the Virginia Coastal Reserve he designed, planned, and constructed wetland, riparian, and upland habitat types in the Coastal Plain, and assisted with weak fish and striped bass studies including data collection and analysis. More recently he has participated in NOAA bottom trawl calibration between the FSV Henry Bigelow and the RV Albatross IV, and performed catch and biological sampling using National Marine Fisheries Service standardized protocols.



PROJECT EXPERIENCE

- *Field Sampling*. Collected ground water, surface water, soil, and paint samples for lab analysis. Samples collected from active industrial sites, hazardous waste sites, military bases, and marine environments.
- *Vessel Captain/Navigator*. NYC CSO vibracoring and sediment sampling in the Gowanus Canal, Brooklyn, NY working with AECOM/HydroQual
- *Vessel Captain/Navigator*. Support of water quality monitoring for turbidity at the Route 6 Bridge construction project in New Bedford Harbor, MA
- *Electrofishing Technician*. Collect species for body burden analysis at the mercury contaminated Fireworks Pond Site, Hanover, MA
- *Oceanographic Technician*. New Bedford Superfund Site vibracoring and sediment sampling under the NED ACE Environmental Services Contract
- *Hydrographer*. Bathymetric surveys Mass Estuaries Program coastal embayments on the south shore of Massachusetts
- *Oceanographic Technician*. NED ACE DAMOS buoy deployment and recovery at dredged material disposal sites from Massachusetts Bay to Long Island Sound
- *Fisheries Biologist*. NOAA Cooperative Research grants on the Effects of Smooth Bottom Trawling on the Ocean Floor
- *Oceanographic Technician*. Coring Tangier Island and Richmond, Virginia for the U.S. ACE Norfolk
- *Vessel Captain/Navigator*. Bathymetric survey ConnDOT bridge construction for barge clearance, Pequonnock River, Bridgeport, CT
- *Oceanographic Technician*. MassDOT water quality monitoring during Route 6 New Bedford Harbor, MA rehabilitation