

## The Issue

- ❧ How might the public help state archaeologists manage and protect the thousands of shipwrecks and other submerged archaeological sites in Oregon waters?



Oregon Maritime Museum



Associated Press

# Proposal

- ☞ A non-profit, volunteer, community-based maritime archaeology organization might be the answer.

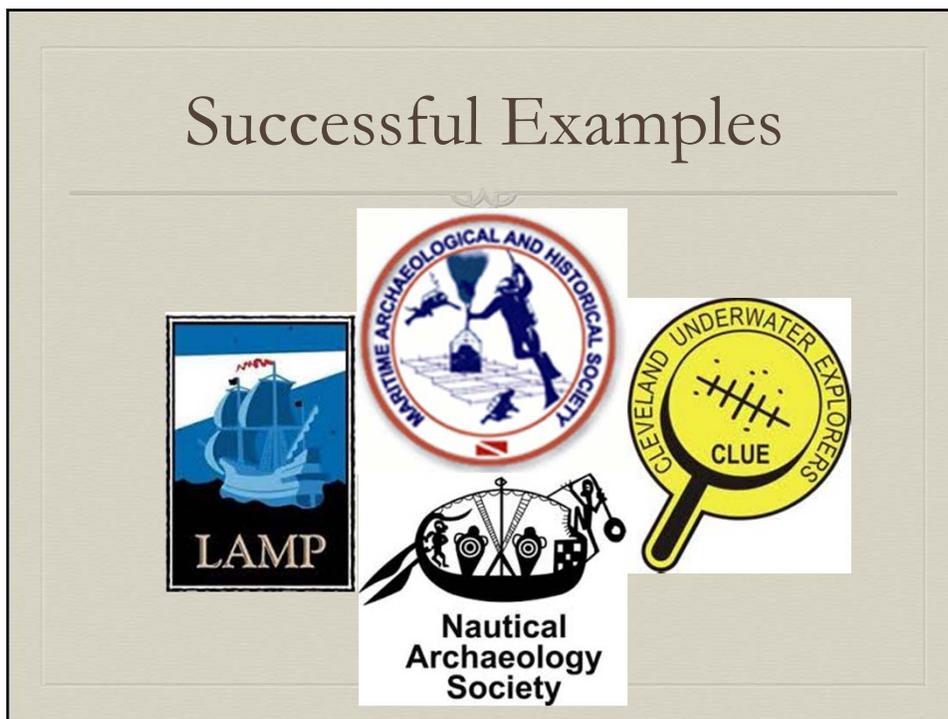


# Advantages

- ☞ Low cost to the states
  - ☞ Most projects at little or no cost to state agencies
- ☞ Community involvement
  - ☞ Educate, connect, and engage the community in underwater heritage protection



## Successful Examples



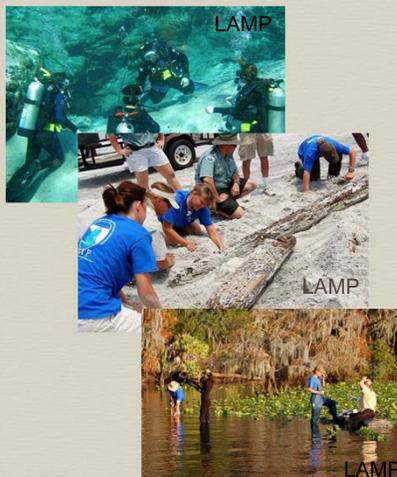
## Maritime Archaeological and Historical Society (MAHS)

- Based in Washington DC
  - 24 years of service
- Pamunkey River Project, VA
  - 2005-2006
  - Surveyed 5 submerged and beached wrecks
  - No cost to state
  - Reports to state archaeologist and updates to master site file



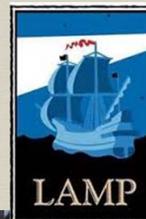
# Lighthouse Archaeological and Maritime Program (LAMP)

- ∞ St. Augustine, FL
- ∞ Established 1997
- ∞ First Coast Maritime Archaeology Project
  - ∞ 2007-Present
  - ∞ Numerous terrestrial and shipwreck sites surveyed
  - ∞ Funded for 2yrs through grant
  - ∞ Reports to state archaeologist and updates to master site file



# Lighthouse Archaeological and Maritime Program (LAMP)

- ∞ High School and College Internships



# Adopt-A-Wreck Programs

- ☞ Buoy shipwrecks
- ☞ Engage and educate public
- ☞ Work with dive shops/boats to ensure conservation compliance



# Efforts in Oregon

- ☞ Beeswax Wreck Project
- ☞ Maritime Archaeological Society (MAS)



Photos courtesy of Beeswax Wreck Project and Clatsop Community College

# The Beeswax Wreck Project



## Early Shipwreck Evidence

- ☞ Beeswax and wooden timbers were from a ship that had wrecked “many years ago”
- ☞ Late 17<sup>th</sup> century Chinese export porcelain found on local beaches and in Native American sites near the shore
- ☞ The wreck has been known by many different names including:
  - ☞ Ancient Wreck
  - ☞ Chinaman Wreck
  - ☞ Beeswax Wreck
- ☞ As early as 1813, Alexander Henry, a local fur trader mentioned the wreck as “the Spanish ship... cast away some years ago”



# The Beeswax Project

- ☞ Nonprofit formed in 2006
- ☞ Mission to investigate source of beeswax and ceramics
- ☞ Working in full cooperation with and under permit or approval of the Oregon State Archaeologist and Oregon State Parks
- ☞ All volunteer
  - ☞ Professional archaeologists/scientists
  - ☞ Interested individuals



Photos courtesy of Beeswax Wreck Project

# Area of Interest

- ☞ Oregon Coast
  - ☞ Approximately 60 mi south of Columbia River
  - ☞ From Cape Falcon in the north to the Nehalem River to the south
  - ☞ Out to 60ft depth contour
  - ☞ Into the Nehalem River and Nehalem Bay

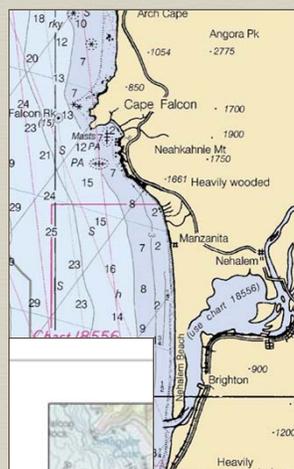


Image courtesy of Beeswax Wreck Project

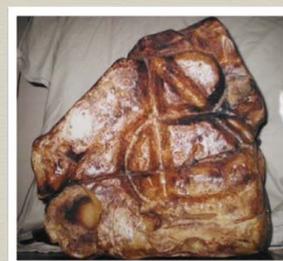
## Rugged and Remote



Photos courtesy of Beeswax Wreck Project

## Wax and Ceramics

- ∞ Hundreds of beeswax blocks
- ∞ Thousands of ceramic sherds
  - ∞ Chinese export porcelain
  - ∞ Earthenware



Photos courtesy of Beeswax Wreck Project

# Historical Wreck Reports

- ☞ Beeswax and timbers reported
- ☞ Nehalem Spit Beach
- ☞ Deflation basin
- ☞ Mouth of Nehalem River
- ☞ Ceramics collected
- ☞ Nehalem Bay
- ☞ North at Short Sands

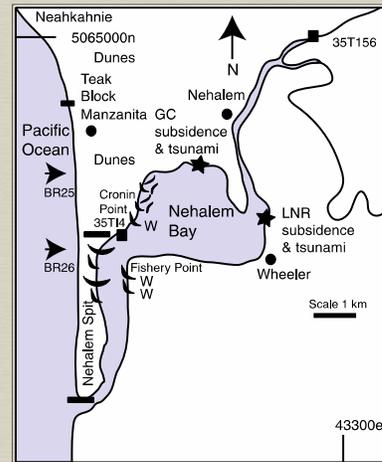


Image from Peterson et. al. 2011

# Tsunami of 1700

- ☞ Cascadian earthquake and tsunami
- ☞ Orphan tsunami in Japan
- ☞ Theory:
  - ☞ Tsunami reduced dune spit and wreckage washed over into the bay

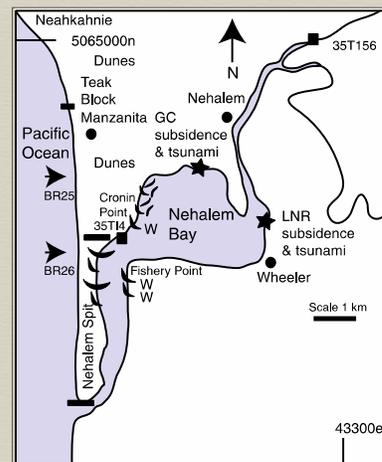


Image from Peterson et. al. 2011

## Likely Galleons

- ☞ *Santo Cristo de Burgos*
  - ☞ Lost 1693
  - ☞ Reported burned in the Marianas Islands
- ☞ *San Francisco Xavier*
  - ☞ Lost 1705



## Early Remote Sensing

- ☞ Terrestrial beach mag survey
- ☞ Limited off-shore mag survey



Images courtesy of Beeswax Wreck Project

# Terrestrial Survey

2008-2010



Photos courtesy of Beeswax Wreck Project

# Beach Ceramics Analysis

Mean Ceramic Manufacture Date

1670-1700



Photo courtesy of Beeswax Wreck Project

# Tsunami Analysis

- ✧ 2010 Dr. Curt Peterson
  - ✧ PSU Geologist
- ✧ Discovered historic shipwreck debris in tsunami deposit layer
- ✧ Shipwreck TAQ 1700
- ✧ Eliminated *San Francisco Xavier*
- ✧ Lost in 1705



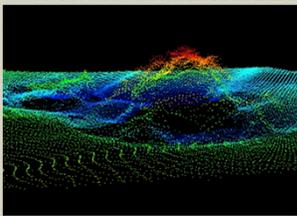
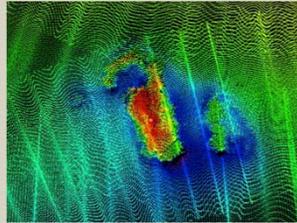
Photo courtesy of Beeswax Wreck Project

# New Ship and New Location

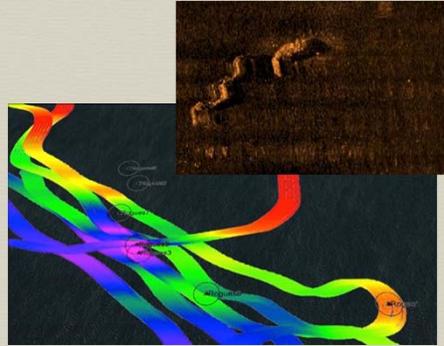
- ✧ TAQ 1700
- ✧ Loss of *Santo Cristo de Burgos* reexamined
  - ✧ Determined to be incorrect
- ✧ Team started to look offshore



# Offshore Remote Sensing



Courtesy of David Evans and Associates Inc.



Courtesy of Seafloor Systems Inc.

# 2012/2013 Diver Investigations

- ☞ Rough Seas
- ☞ Low Visibility



Photos courtesy of Beeswax Wreck Project

## 2014 Field Season

- ☞ Recruited and trained volunteer divers
- ☞ Laws and regs
- ☞ Underwater search procedures
- ☞ Projects dive specifics
- ☞ “Parking Lot” Archaeology
- ☞ Pool practice



Photo courtesy of Beeswax Wreck Project

## 2014 Field Season

- ☞ Investigated multi-beam, side-scan, and magnetometer targets in the area of interest
- ☞ 3 dive days
- ☞ 5 total dives



Photos courtesy of Beeswax Wreck Project

# 2014 Diver Investigations



# Plans for Summer 2015

- Comprehensive magnetometer and side-scan survey of area of interest



Photos courtesy of Beeswax Wreck Project and Navico

## Plans for Summer 2015

- Investigate anomalies with divers and ROVs



Photos courtesy of Beeswax Wreck Project and Clatsop Community College



## Maritime Archaeological Society

- Promote public education in maritime cultural heritage, historic shipwreck preservation, and the science of maritime archaeology.





## Projects and Goals

- ☞ Establish Archaeological Diver training
  - ☞ Source of divers for MAST
  - ☞ Partner with:
    - ☞ Local dive shops
    - ☞ Community colleges



## 2015 Project Proposals

- ☞ Possible *Emily Reed* Wreck



# 2015 Project Proposals

## ☞ Nehalem Bay Wreck



# Projects and Goals

## ☞ Maritime Archaeology Education Project

- ☞ Partner with Clatsop Community College (CCC) to provide maritime archaeology awareness classes to the public
  - ☞ CCC community education courses
  - ☞ Exploring New Concepts of Retirement Education (ENCORE)
- ☞ Provide instruction and guidance for development of maritime archaeology courses and certificate programs
  - ☞ Maritime archaeology (Lower Division) course
  - ☞ Remote sensor operator/technician certificate



## Goals and Projects

- ☞ Follow-on Capability
- ☞ Maritime Artifact Conservation Program
  - ☞ Partner with the Columbia River Maritime Museum (CRMM) to provide archaeological artifact conservation, curation, and documentation expertise
  - ☞ Provide support to CRMM in order to establish an alternative curatorial facility and limited conservation facility for maritime artifacts in Oregon
  - ☞ Coordinate and/or perform conservation, curation, and reporting activities as required by OSMA, U. S. Navy, and other authorities



## MAS Organizational Structure

- ☞ Membership
  - ☞ Open to any person who supports our purpose
  - ☞ Modest annual dues
  - ☞ Corporate memberships and sponsors
- ☞ MAS Volunteer Positions
  - ☞ Historical Researcher
  - ☞ Shore-Based Archaeological Technician (non-diving)
  - ☞ Underwater Archaeological Technician (diving)
  - ☞ Maritime Archaeology Crew Chief
  - ☞ Remote Sensor Operator
  - ☞ Conservation Technician
  - ☞ Support Personnel



# MAS Organizational Structure

- ∞ MAS Volunteer Training
  - ∞ Introduction to maritime archaeology
  - ∞ Archaeological ethics and regulations
  - ∞ Specialty training
    - ∞ Historical research methods
    - ∞ Field methods (maritime and terrestrial)
    - ∞ Underwater Archaeology Field School
    - ∞ Remote sensor operations
    - ∞ Ship construction fundamentals
    - ∞ Artifact conservation
    - ∞ Safety training



# Finances

- ∞ Sustainable funding sources
  - ∞ Memberships
  - ∞ Corporate memberships and sponsors
  - ∞ Fundraising
- ∞ Grants for specific projects
  - ∞ Partner with other organizations



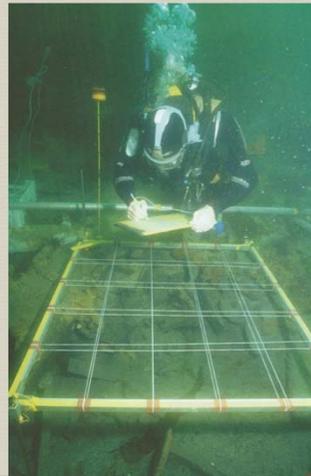
## Assets on Hand

- ☞ Trained cadre of divers
  - ☞ Beeswax Wreck Project divers
- ☞ Some underwater archaeological equipment
  - ☞ Boats
  - ☞ Structure-Scan (side-scan) sonar
  - ☞ Magnetometer
  - ☞ Slates, tape measures, etc.
  - ☞ Emergency O2 kit
- ☞ Access to other equipment
  - ☞ Underwater metal detectors
  - ☞ CCC ROV club assets



## The Way Ahead

- ☞ Get buy in from stakeholders
  - ☞ CRMM ✓
  - ☞ CCC ✓
  - ☞ Local dive shops and clubs ✓
  - ☞ OR State Archaeologist ✓
- ☞ Fill board vacancies
- ☞ File as OR non-profit corporation
- ☞ File as IRS charitable organization (501.c3)
- ☞ Recruit and train volunteers
- ☞ Get to work!



# Questions?

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