

Humboldt State University Marine Lab Procedures Manual

July, 2007
570 Ewing Street
PO Box 690
Trinidad, CA. 95570

www.humboldt.edu/~marinelb



Table of Contents

Topic	Page
Table of Contents	2
Mission	3
Description of HSU ML	3
Past and Present Directors	6
Organizational Chart	7
HSU ML Floor Plan	8
Phone Directory	9
USGS Map	10
NOAA Chart 18605	11
Trinidad Bay	12
Routine Operations	13
Summary Guidelines	17
Copies of Forms	18

1. Mission Statement

Humboldt State University Marine Lab

The mission of the Humboldt State University Marine Laboratory (HSU ML) is to provide a center for marine and environmental teaching and research. The primary use of the facility is teaching both undergraduate and graduate students. Students and faculty are also actively engaged in research which the laboratory supports and encourages. The HSU ML also provides public display aquaria and programs for the education of the general public. In teaching research and service the HSU ML provides an integral part of the mission of Humboldt State University.

R.V. Coral Sea

The mission of the Humboldt State University Research Vessel *Coral Sea* is to provide a platform for marine and environmental science teaching and research. The primary use of the vessel is undergraduate teaching. Student and faculty research are encouraged and supported. Contract research is also encouraged when it either expands the educational opportunities of students or provides funding for the maintenance of the vessel. In teaching and research roles, the vessel is an integral part of the University.

2. Basic Description of the HSU ML.

The Humboldt State University Marine Lab is located in Trinidad, California. The facility serves the community of Humboldt State University (HSU), the main campus is located 14 miles south in Arcata. HSU ML serves local and regional scientists from other universities, local, state and federal government agencies and NGO's, university and K-12 students from outside HSU and the community at large of Northern California. HSU is one of the 22 California State University system schools and has a well-deserved reputation for high quality science programs. HSU has always offered outstanding undergraduate instruction. Over the past twenty years successful graduate education and independent research have been the focus of the HSU ML. The primary mission of this marine laboratory is to support undergraduate and graduate students with wide ranging opportunities to carry out their own independent research projects. From its inception, HSU's Marine Laboratory has had a student centered research mission; it has been very successful at this mission for the past 42 years.

Site History. Located on a 100 ft bluff that overlooks the Pacific Ocean, HSU ML was constructed in 1964 at an original size of 7,400 sq ft on 1.3 acres. In 1975, it was expanded to 16,208 sq ft adding additional research, support spaces and offices with funds from the university.

Facility Administration. The Director of the Marine Lab, L. Scott Quackenbush, is also a Professor of Biological Sciences and Associate Dean for Marine Science programs, he reports to the Dean of the College of Natural Resources and Sciences. The Associate Dean has the lead role in coordination, development and promotion of all HSU's marine science programs through representation of HSU at various multi-institutional meetings, through preparation of grant proposals to support marine science programs and facilities, and by working closely with marine sciences faculty. The 2002 Strategic Plan for Marine Sciences at HSU, (<http://www.humboldt.edu/~marinelb>), outlines the faculty driven improvements at the HSU ML of the past 10 years and suggested future directions. One key component of this strategic plan is increasing the capacity of the HSU ML to support HSUML Policy.9.4.07

both intramural and extramural faculty and student research activities.

Research Areas. HSU ML now has two 1,100 square foot instructional classrooms (one wet the other dry), 7 research laboratories (250-525 sq. feet) (renovated in 2002 with NSF FSML funds), 10 faculty offices, 10 offices for graduate students, 6 rooms that support education and research, a conference room, 3,000 square foot wet lab, public display aquaria and a mechanical, wood, plumbing shop.

Buildings. The main building is 16,208 gross square feet; we have 5 additional storage shed buildings totaling 1,200 sq ft.

Equipment. HSU ML is supplied with the typical equipment (analytic balances, centrifuges, etc.) and materials (glassware, microscopes, etc.) required for marine biology, fisheries, mariculture and oceanographic instruction and research. More specialized major instrumentation include: UV-Vis double beam spectrophotometer, Gas Chromatograph, high capacity Liquid Scintillation Counter, Laser Particle Analyzer, X-ray machine, Freeze dryer, HPLC, electrophoresis set ups, electrophysiological recording equipment and several research grade inverted and polarizing microscopes. New dissecting microscopes and a compound microscope with phase interference optics, fluorescence, and digital video and photomicrography capability are also available for faculty and students. Underwater video cameras, (VHS, High -8, and digital) underwater still cameras (film and digital) and a Remotely Operated Vehicle (Deep Oceans: Phantom 300 XL, with 75m and 330 m umbilical) are also available at HSU ML for faculty and student use. Thirty high-quality dissecting microscopes and 30 high quality compound microscopes purchased by the university in 1996 are in classrooms for students.

The 120,000 gallon recirculating seawater system supplies seawater to the wet lab, classroom and wet research labs with high-quality, filtered and chilled seawater. Seawater is pumped from Trinidad Bay into two 50,000 gallon storage tanks above the Laboratory. Seawater is gravity fed to a sump, then pumped through sand filters before distribution throughout the facility. The seawater system was renovated in 1998 with new high-rate sand filters, pumps and chiller units and can now maintain water temperatures at approximately 11-12⁰C (local ambient) throughout the year.

The lab operates several small outboard boats and a 90-foot, ocean-going research vessel, the [R.V. Coral Sea](#). The R.V. *Coral Sea* is used extensively for class field trips, field research opportunities and experience. Ship costs are paid for from internal HSU funds for teaching and student research. The vessel maintains an active contract schedule for HSU faculty and outside scientists paid from their grants or contracts. [The R.V. Coral Sea](#) (<http://www.humboldt.edu/~hsuship/>) is a well equipped modern support vessel for all types of offshore projects. Many R.V. *Coral Sea* projects involve the collection of local marine fauna and flora that are then maintained at HSU ML.

The open access (visiting scientists, students and faculty) computer lab (175 square feet) has six desktop computers (purchased 2007) for use by students and visiting scientists. They are equipped with typical software, scanners and printers. High speed wired internet connections are accessible from these computers and from all laboratories and offices. In 1998, the Laboratory was connected to campus with a T1 line, which has made telephone and internet communication through our server fast and efficient. The lecture rooms and conference room share an internet connected laptop and video projector for lectures. The

telecommunications equipment and servers were upgraded again this year (2006).

Access and Transportation. Housing is available to students and visiting scientists on the HSU main campus dormitories in Arcata. The regional airport is 7 miles from the lab and is served by 2 national airlines. Several small motels, bed and breakfasts and campgrounds are located within 3 miles of HSU ML. A municipal bus system provides a 30 minute ride to the Laboratory from Arcata. Automobiles access the HSU ML from the HSU campus in 20 minutes and most students carpool from main campus to their classes at HSU ML.

Data systems

The lab maintains an onsite weather station and directly monitors seawater conditions at five nearby sites. This 20 year dataset is available in the Marine Naturalists office. At the nearby Trinidad pier, CI CORE maintains a sensor and data logger for: depth, temp., salinity, dissolved oxygen, turbidity, chlorophyll a. [Data and metadata](#) can be accessed at the website: <http://cicore.humboldt.edu> . NOAA maintains an atmospheric observatory at nearby Trinidad Head manned by Mike Ives, resident at the HSU ML. In addition to the sensors for atmospheric chemistry, this baseline lab also launches balloons from HSU ML. Data from [this observatory](#) can be obtained from the website: <http://www.cmdl.noaa.gov/obop/thd.html> . Data collected by the [PaCOOS](#) cruises will be accessible with their other datasets at <http://www.pacoos.org> .

Data Management. In support of its mission of teaching, research and public service, Humboldt State University provides access to computing and information resources for students, faculty and staff within institutional priorities. Privileges for access can be extended to visiting faculty, students or staff.

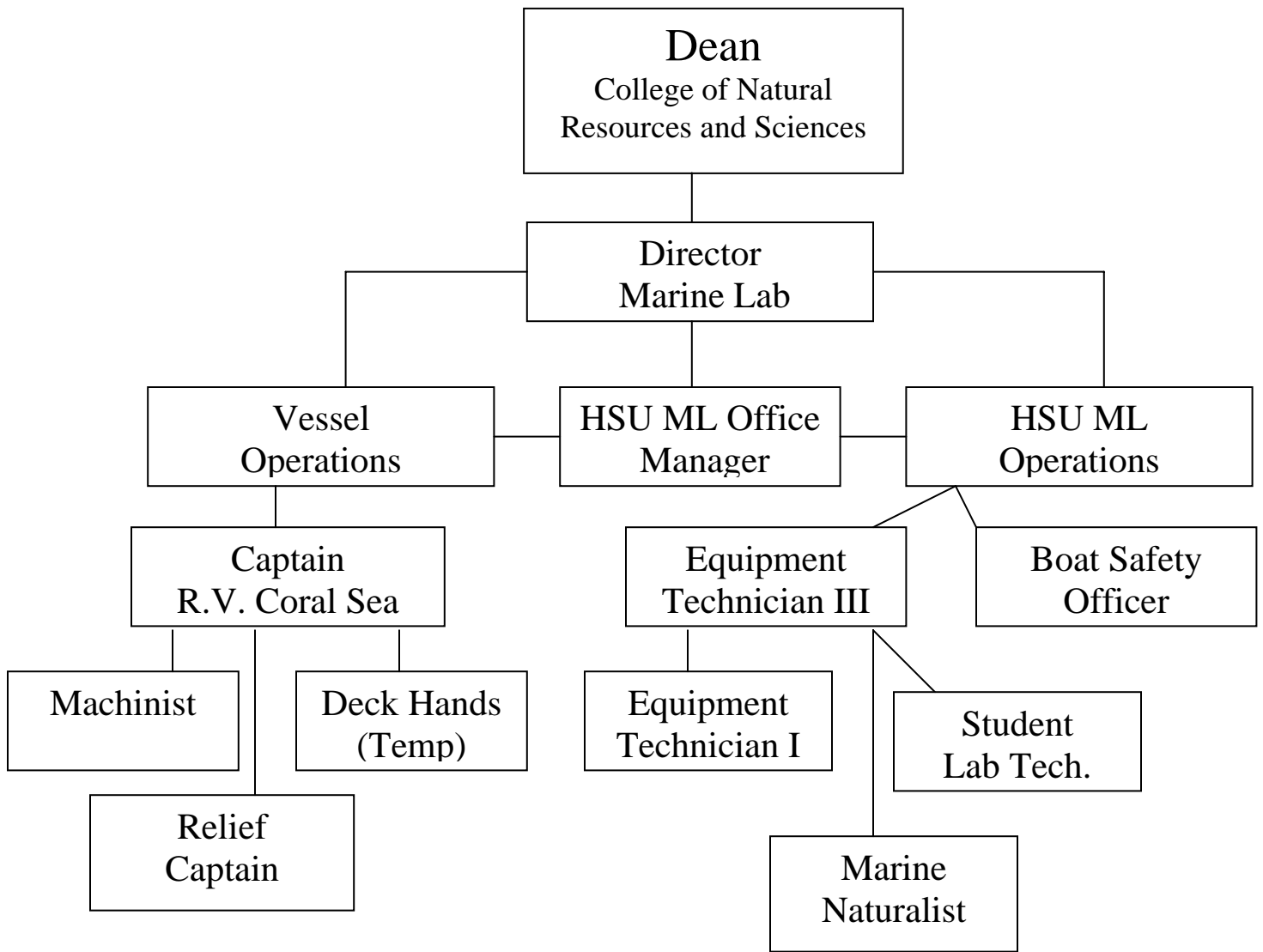
Staffing .The Associate Dean supervises the HSU ML's resident staff: an office manager, two full-time technicians, a boat safety officer and several part-time technicians (HSU students hired seasonally), and one part-time naturalist. The Associate Dean also supervises the R.V. *Coral Sea's* full-time Captain, full-time Engineer and part-time crew (students hired seasonally).

Aspects of Ecosystem

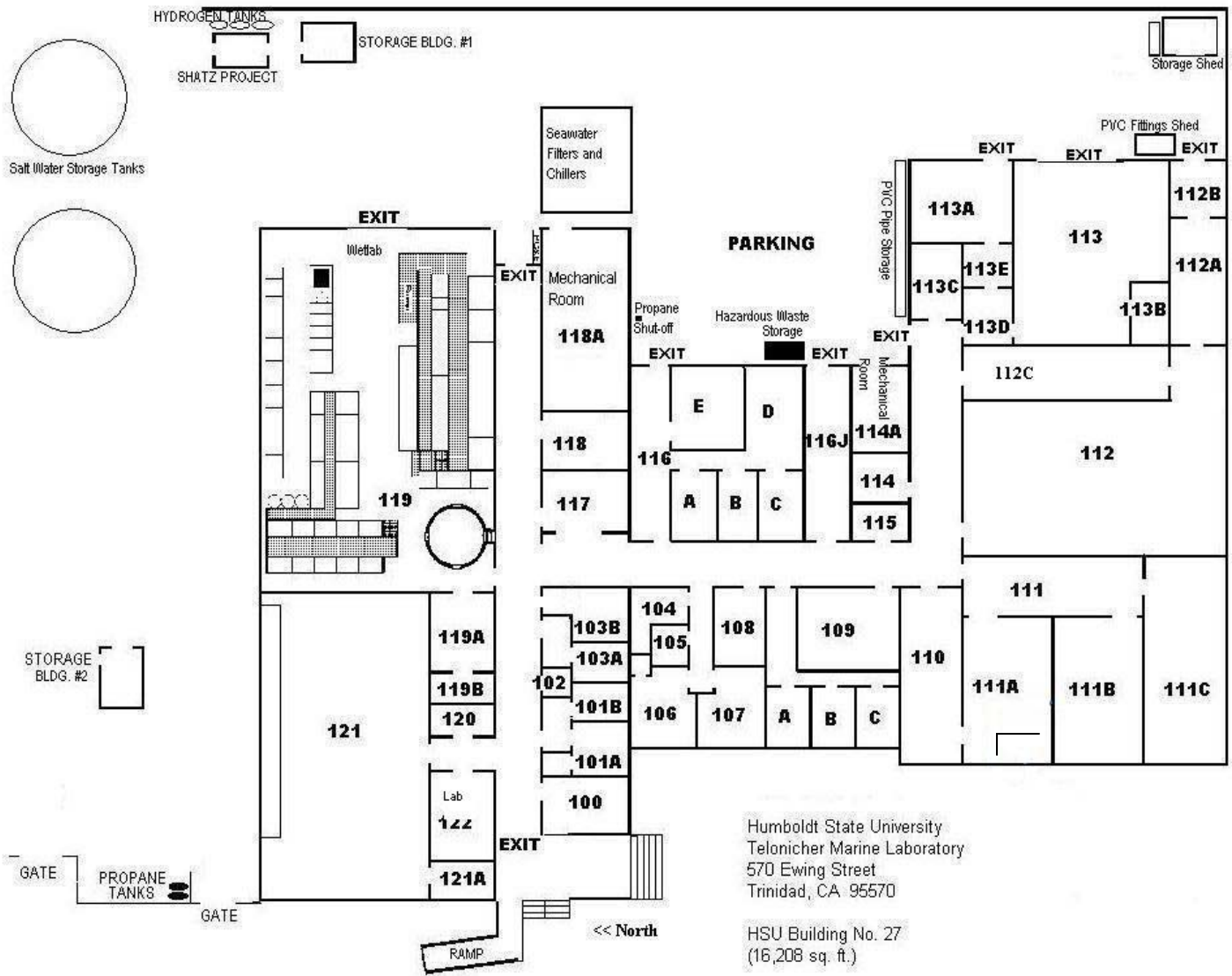
A 5 minute walk from the laboratory gives students and faculty access to Trinidad State Beach and Trinidad Bay and its dock facilities (<http://www.humboldt.edu/~marinelb>). In 1976, the Trinidad Bay Kelp beds (ASBS # 6) were designated as an Area of Special Biological Significance (ASBS) by the State of California in recognition of the pristine nature of this local habitat. Pristine sandy beach, rocky intertidal and subtidal habitats, as well as offshore habitats are accessible from the lab.

Past and Present Directors: HSU Marine Laboratory 1964 - 2007

Dr. James Gast Director Vessel Superintendent	Oceanography Department 1964-1970 1986-1992
Dr. Gary Brusca Director	Biology Department 1970-1972
Dr. George Crandell Director	Oceanography Department 1972-1974
Dr. Ted Kerstetter Director	Biology Department 1974-1979
Dr. John DeMartini Director	Biology Department 1979-1984
Dr. Ronald Chaney Director	Environmental Engineering 1984-1990
Dr. John Pequegnat Director Vessel Superintendent	Oceanography Department 1990-1994
De. Jeffry Borgeld Director Vessel Superintendent	Oceanography Department 1994-1996 1995-1996
Dr. Ronald Chaney Director and Interim Vessel Superintendent Interim Marine Science Superintendent (MPP)	Environmental Engineering 1996 - 1999 January 2000 – August 2001
Dr. Dennis Thoney Marine Lab Director Marine Facilities (MPP)	March, 2001 – 2004
Dr. David Hankin Marine Lab Director	Fisheries Department 2004-2005
Dr. Scott Quackenbush Marine Lab Director Associate Dean for Marine Science Programs	Biology Department 2006 to present



HSU Marine Lab Organizational Chart 2007



HSU Marine Lab Floor Plan 2007

MARINE LAB FACULTY & STAFF DIRECTORY
 MARINE LAB PHONE NO. 826-3671 FAX NO. 826-3682

<u>Staff and Faculty</u>	<u>Email</u>	<u>ML #</u>	<u>Campus #</u>	<u>ML Office</u>
Scott Quackenbush	quackenbush@humboldt.edu	3685		107
Leslie Farrar	laf7001@humboldt.edu	3671		100
Dave Hoskins	dmh7001@humboldt.edu	3691		116E
Grant Eberle	gae7002@humboldt.edu	3702		116E
Steve Monk	sjm40@humboldt.edu	3686		116A
Jeff Abell	ja49@humboldt.edu	3692	5621	116B
Eric Bjorkstedt	Eric.Bjorkstedt@noaa.gov	3688		111D
Jeff Borgeld	jcb2@humboldt.edu	3687	3328	109C
Sean Craig	sfc4@humboldt.edu	3695	3656	109A
Sarah Goldthwait	sg65@humboldt.edu	3692	4289	116B
Dave Hankin	dgh1@humboldt.edu	3683	3447	106
Tim Mulligan	tjm2@humboldt.edu	3684	3951	109B
Helen Mulligan	hlm1@humboldt.edu	3693	3542	116C

Marine Naturalist

Zoe Dagan	marnat@humboldt.edu	3689		118
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Lab Techs

Emily Xanders	dolphinqueen630@aol.com	3690		118
Nicole Torres	ntorres@hotmail.com			118
Natalie Grace	nmg16@humboldt.edu			118
Jennifer Kavanaugh	jmk59@humboldt.edu			118

Projects

Mike Ives	michael.ives@noaa.gov	3706		112C
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Rooms / Labs

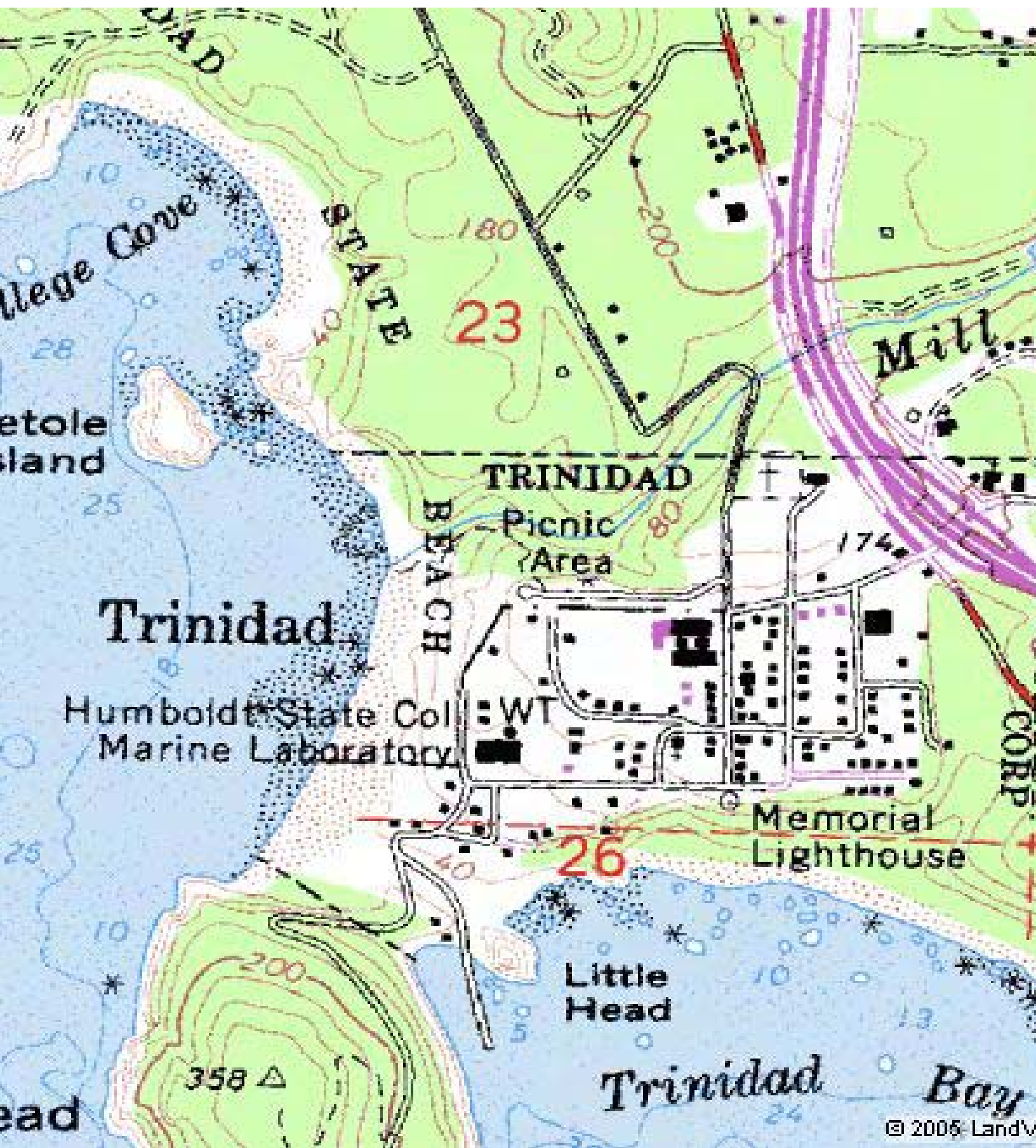
111A Bjorkstedt / NOAA Fisheries	3688	111A
111B Biology Lab	3703	111B
111C T. Mulligan / Fisheries	3700	111C
112A Borgeld / Geo. Ocn.	3701	112A
112C Oceanography Lab	3706	112C
113A Goldthwait / Bio. Ocn.	3705	113A
113 Workshop	3704	113
108 Faculty & Staff Computer	3681	108
117 Student Computer Room	3694	117

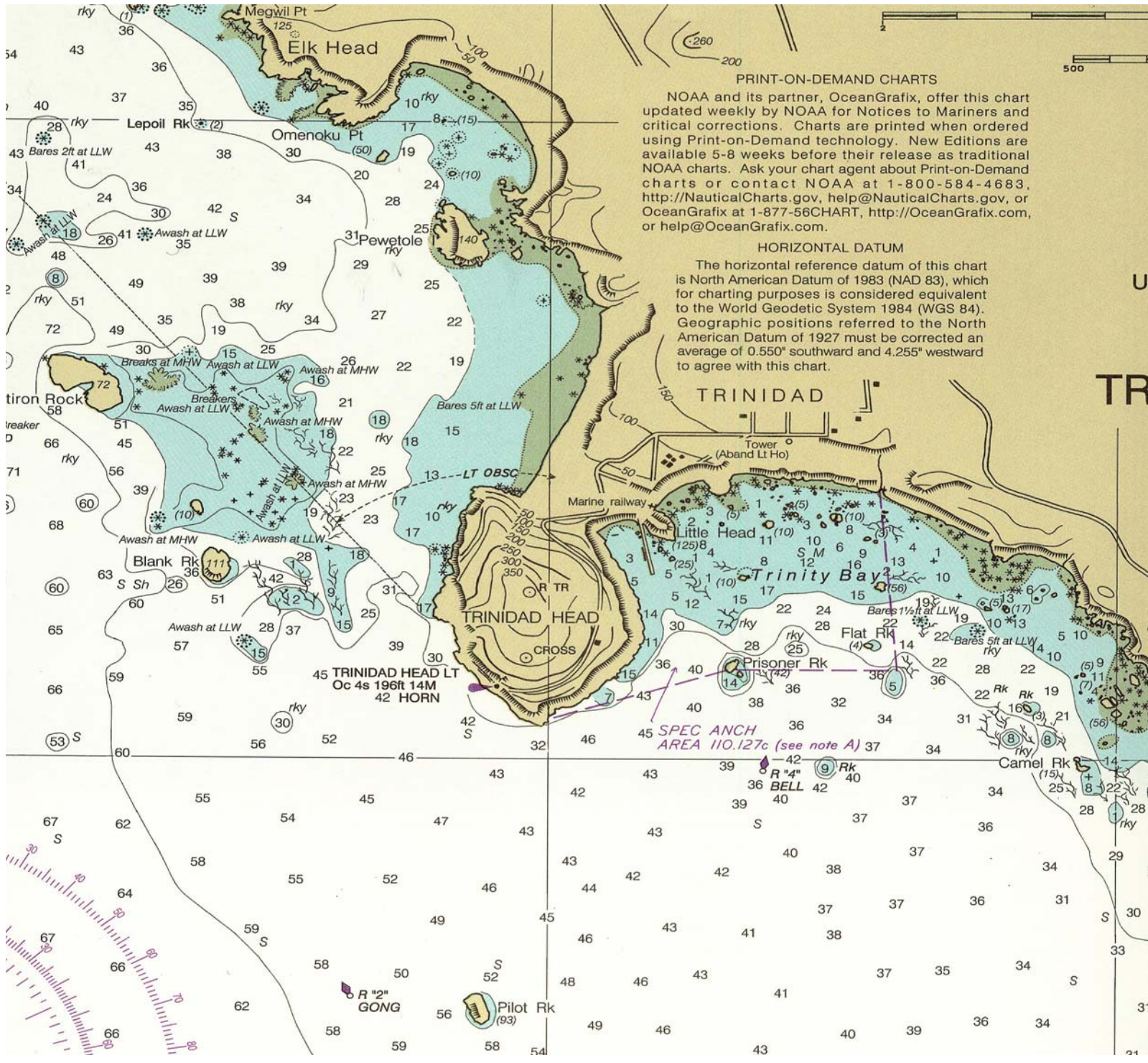
Coral Sea

Scott Martin	rsm31@humboldt.edu	499-5090 (cell phone on the ship)
Chris Seitz		599-2147

Other Marine Science Faculty

<u>Other Marine Science Faculty</u>		<u>Department</u>	
Milt Boyd, mjb3	3246	Ed Metz, ecm10	3240
Greg Crawford, gbc3	3466	Frank Shaughnessy, fjs3	4133
Megan Donahue, mjd37	3219		
Dawn Goley, pdgl	4168	Susan Schlosser, scschlosser@ucdavis.edu	443-8369 (fax)
		445-3901)	





PRINT-ON-DEMAND CHARTS

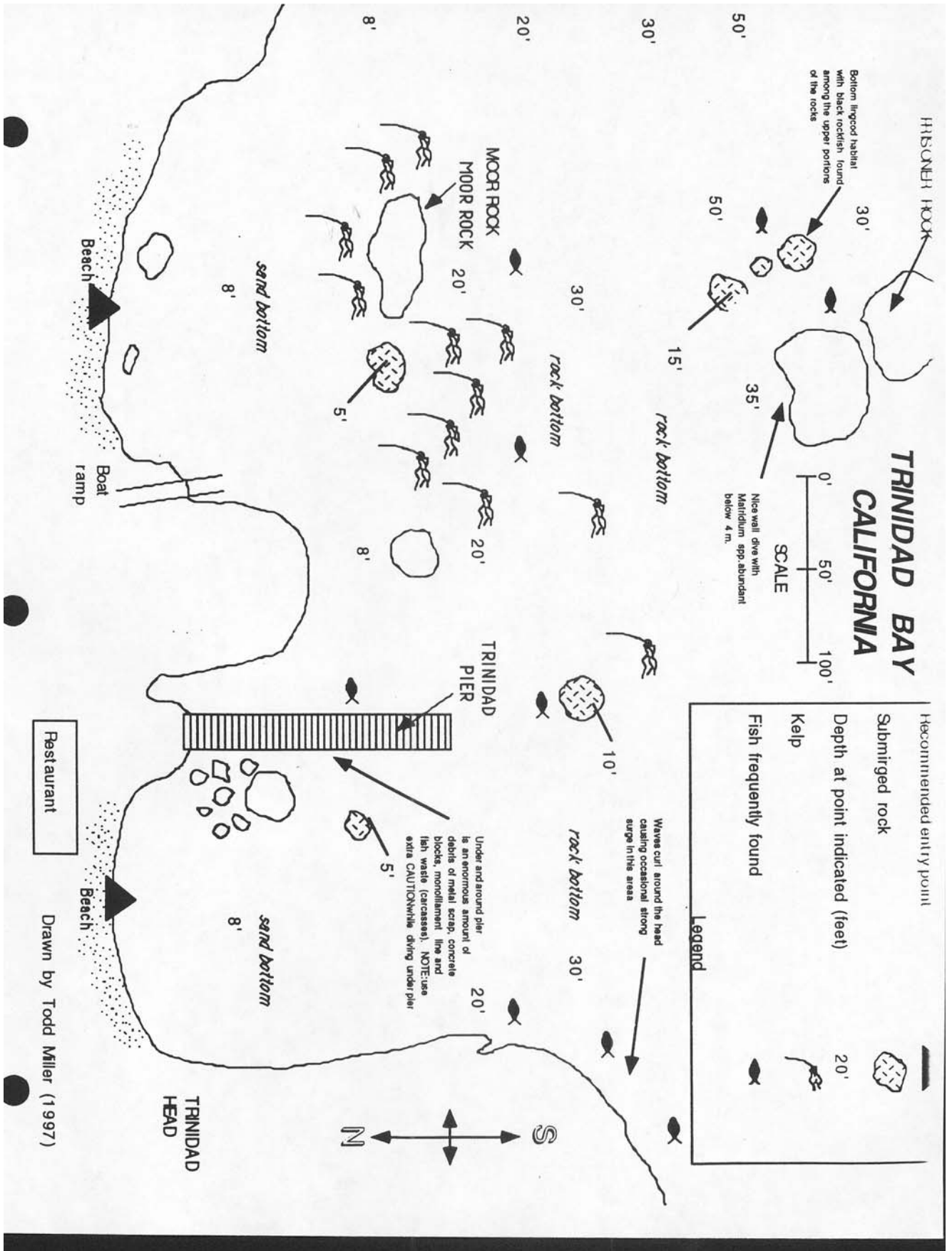
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or help@OceanGrafix.com.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.550" southward and 4.255" westward to agree with this chart.

SPEC ANCH AREA 110.127c (see note A) 37

NOAA Chart 18605



3. Routine Operations

Space Assignments

Research space is assigned to the departments by the Dean of the College.

Teaching classrooms must be reserved in advance, prior to the printing of the HSU Schedule. The Department Chair or the Department Secretary will contact Leslie Farrar of the Marine Lab to find out when rooms are available. These rooms are scheduled according to availability. Leslie Farrar will reserve the rooms, and the requesting faculty/secretary will notify enrollment management of the location of classes. Upon receiving all requests for rooms, the Office Manager will create a Weekly Calendar with the classes/times/instructors for which rooms are reserved. The classrooms are also used by outside agencies and tours. See guidelines for use of Marine Lab by outside agencies and Public Tours Policy. At no time will these types of usage interfere with ongoing HSU classes.

Wet Lab space is assigned to faculty, students and visitors based on a completed project application for use of the wet lab. Mr. Hoskins or Mr. Eberle will assign the actual space to the users once the form is completed.

Hours

The lab will be open to all weekdays from 0800 to 1700 hours, and during the weekends from 1200 to 1600 during the academic year at HSU. An HSU Key card will be required to open the doors at any other time. Students and visitors without HSU Key Cards may not stay in the lab past normal working hours of 0800 to 1700. In order to obtain an HSU Key Card see Dave Hoskins.

Equipment Use

Do not move equipment from one lab to another lab. Since many of the equipment users come and go, we keep common use equipment in one particular lab. Do not take any electrical equipment into the Wet Lab area; it is dangerous, and it destroys unprotected equipment. Both Mr. Hoskins and Mr. Eberle are available to help anyone at almost anytime learn how to use equipment safely and correctly.

Computers

Common use computers, printers and scanners are available in room 117. If you need instruction or help, please ask Mr. Hoskins or Mr. Eberle. Do not install any additional software on the common use equipment. Your personal files will be deleted at the end of the semester. The computer in the copier room, 108 is reserved for visiting faculty.

Projects

Any and all use of the Marine Lab or RV Coral Sea must be specifically approved in writing by the Director before any project work can begin. This requires filling out completely our form called: [***Research Project Description Form***](#) for projects at HSU Marine Lab or the [***Cruise Request form***](#) for projects using the R.V. Coral Sea. Both forms can be downloaded from the lab's [website](#). A final report and check out by the staff is required for all activity. Final reports can be submitted to the Director at anytime, but always before 1 June of each year. We need the final reports to prepare our annual report and keep track of all lab activity.

Permits

The state of California requires each individual collector to be licensed. If you do not have a license for collection of marine plants, animals, you may not collect marine plants, animals. All collectors must have a copy of their [current license for collection](#) on file in the main office before they go collecting and if they want to use the wet lab for any experiments.

To obtain a collection permit please contact:

<http://www.dfg.ca.gov/hcpb/ceqacesa/rsrchpermit/rsrchpermit.shtml> or
<http://www.dfg.ca.gov/licensing/specialpermits.html>

The University requires that any experiment or maintenance of vertebrates must first be approved by the HSU Institutional Animal Care and Use Committee ([IACUC](#)). It is the responsibility of the investigator to obtain timely approval for the holding, maintenance and experimentation of any vertebrate (<http://www.humboldt.edu/~iacuc>).

Biowaste

Any biological material: plant animal or other that was recently living material must be disposed of in the special BIOWASTE container located in the walk-in freezer of room 119 B, just inside the Wet Lab. Please do not put recently living and/or decaying biological material in any other trash can designed for paper trash.

HAZARDOUS WASTE

Any liquid or solid chemicals that can pose a hazard to you or the planet must be disposed of in the properly labeled containers for HAZARDOUS WASTE. See Mr. Hoskins or Mr. Eberle for a special container if you generate HAZARDOUS WASTE. This material is stored in a special yellow shed outside room 116.

Lab Courtesy

If you put anything in any one of the aquaria, tank, tray, wet table, refrigerator, desiccators or freezer it must be labeled with ***YOUR NAME, START: DATE and END: DATE***. If anything is found without a label it will be considered trash, Biowaste or hazardous waste and disposed of in a proper manner. You are personally responsible for the care and feeding of all animals and plants or other material of your project. Likewise you are personally responsible to clean up any mess you make in any lab at anytime. We do not have the staff to clean up after everyone. You are personally responsible for breaking down and cleaning any general use lab material and equipment for your projects. If you have HSU Key Access to the building after hours, you will be responsible for locking up the lab and turning off the lights. The staff will close at 1700 each day and lock up. After 1700, the last person out turns off the lights and locks the doors.

First Aid

Kits are located in rooms 110 and 122 to the right of the entrance. There are eyewash stations in all labs. There is an emergency shower in 112 and hand sprayers in 110, 111, 112A and 121. If an accident happens during working hours, please notify the office after rendering first aid. If an accident happens after hours please notify the Director or Mr. Hoskins by phone as soon as practical.

Sea Water Emergencies

In the event of a significant sea water emergency contact the staff during working hours or call the staff after hours from the Phone List on page 10, and posted in the Copier Room and elsewhere.

Small Boat Use

Boat users must first be certified by the completion of a Safe Boating Course from the CNRS. Obtain [a cruise plan form](#) from the Boat Safety Officer, Mr. Steve Monk, also on the lab website. Students must see their sponsoring faculty for details. See the Boating Operations section of the [website for forms](#).

Marine Lab Tour Policy

The objective of the HSU ML tour policy is to allow for public tours and student groups using the HSU ML public areas while maintaining a productive work environment for those students, faculty and staff which also use HSU ML facilities.

Guided tours are scheduled and conducted by the Marine Naturalist and cost \$2.00 per person. Groups as large as 30 can be accommodated.

Self guided tours are currently free to the public for all groups under 10 persons. A donation of \$ 1 per person or \$ 5 per family is requested for self guided tours.

If more than 10 persons wish to use the HSU ML, they must enter in groups smaller than 10 persons with appropriate supervision. Any disruptive group either guided or self guided may be asked to leave the facility if requested by staff or faculty.

Marine Lab Rental Use Policy

The use of the Marine Lab spaces and equipment by faculty, students and staff from other universities or groups is encouraged. All uses of the facility by those outside HSU must be approved in advance by the Marine Lab Director in writing. Prior to arrival each non-HSU users must have on file a Release and Consent Agreement, available from the website or the office. Lease agreements for the use of the lab and its equipment can be obtained from the HSU Contracts Office at 707-826-3512. Current charges for the use of the HSU Marine Lab (2007) are:

1. Classroom : First Hour: \$71.00, additional Hours \$7.00: 8 hours: \$120.
2. Lab : First Hour; \$74.00, additional Hours \$10.00: 8 hours: \$144.00
3. Computer Lab : First Hour: \$188.50, additional Hours \$7.00: 8 Hours: \$ 107.75
4. Research lab : \$1.75/square foot/month

These fees are required by the State of California and can not be waived. Additional equipment use fees will be negotiated for use of equipment such as wet tables, glassware, microscopes etc on an ad hoc basis.

Parking

Car parking is very limited at the HSU ML. Seven spaces in front of the lab are available for the public and HSU faculty, students and staff. Across the street there are an additional 4 spaces from the State Park access. 3 additional spaces are available to HSU students and faculty along the north side of the building inside the fence. The City of Trinidad enforces the red curb parking restrictions within the city. Additional parking is available on Edwards Street and down the hill at the Beach access.

Mail

Campus internal mail is picked up each day and delivered to Mailroom boxes by 9:30 AM. Outgoing campus mail should be placed in canvas mail bag for return trip. Federal mail is picked up each day at the post office and delivered to the mailroom by 9:30 AM; large boxes are placed on the shelf just below regular mailboxes. Outgoing and incoming shipments are the responsibility of the shipper or receiver. Please notify the office and staff when you expect large, unusual or hazardous material delivery. Staff will help with shipments when practical, but all responsibility for both outgoing and incoming shipments lies with the users.

Marine Lab Truck

The truck is primarily for staff use at the Marine Lab. Use of the truck for HSU classes taught at the Marine Lab is allowed. The cost of using the ML truck for HSU classes will be paid by the HSU ML up to \$500 per year, thereafter use will be charged to specific departments. **Use of the truck for research programs, student projects and classes not taught at the ML will be charged at the current HSU Motor Pool rate of \$1.00 per mile or \$ 25.00 per day, whichever is greater. There will be a \$25.00 per day fee when the truck is parked over night and not available for others to use.**

To reserve the truck, please call Dave at x-3691 or Grant at x-3702. Please provide an HSU account number or Foundation account number to be charged at the time the truck is reserved. Reservations not canceled 24 hours in advance will result in a charge of \$25.00 to your department.

General Rules for Use of the Truck

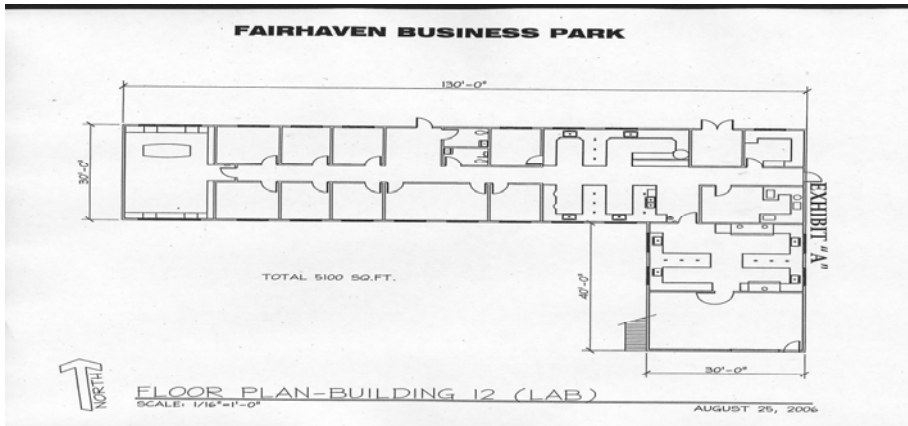
1. Only HSU employees may drive the truck. Foundation employees, employees of other agencies, nor students can drive the ML truck unless they are employees of the University or have a [volunteer form](#) on file with Human Resources.
2. Truck can be used for University activities only, no private use.
3. Drivers must have: a). HSU ID card b). Valid California Drivers license and c) CA. Defensive driving card.
4. Only Certified Boat Users can use the truck for hauling or launching boats.
5. Reservations are for one day, no more than two weeks in advance. No long term truck use can be accommodated.
6. Please rinse the truck after returning from hauling wet gear or launching a boat. Protect the seat from wet clothing.

Copier Room

Room 108 has a faculty / staff computer, the HSU ML fax machine and a copier. To access the copier you must use a department code, if you need access see the office manager.

HSU Marine Lab South

The University has rented a building in Samoa, called HSU Marine Lab South. We have offices, labs, and storage and shop space at this facility. Space is allocated by the HSU ML Director, please see him for space assignment and use guidelines.



4. Summary Guidelines for use of the [HSU Marine Laboratory](#)

[Project Description Forms](#) are available on the HSU Marine Lab [website](#). All projects must be authorized by the HSU ML Director and a faculty member. Projects started without prior approval will be removed. Label your project space or you may lose it.

1. Hours: The HSUML will be open weekdays from 0800 to 1700 and weekends or holidays as announced. Access outside the regular open hours will require issuing keys in advance. Key requests will not be signed by HSUML Staff without prior faculty signature. *** **Students without keys may not stay after closing*****
2. Equipment: Bench equipment, microscopes, balances, and other instruments will be used in the room where it is located. You may not move equipment without authorization. No Microscopes or balances are allowed in the Wet Lab room # 119. Balances should be cleaned after each use. Keep saltwater off all equipment unless it is designated for FIELD use. If you are not familiar with the equipment you need, ask your faculty member or a HSU ML staff member.
3. Computers: Student use computers are in room # 117 and are available for those working on projects or taking classes at the HSUML. All computers have email and internet access. Password for network login is: "student". See your faculty or HSUML Staff for instructions on use. The HSUML only supports legal copies of software we purchased. Personal file stored on the hard drives will be deleted. The Faculty computer in room # 108 is for faculty or staff, not student use. See the [policy manual](#) on the website.
4. Biowaste: Biological material (plant, animal, or anything living but now dead) is to be disposed of in the metal trash can in the walk-in freezer off the wet lab in # 119B. Do not put biowaste in the Classroom trash cans. See the [policy manual](#) on the website.
5. Hazardous Waste: Do not pour HAZARDOUS waste down the drain. Hazardous waste must be disposed of properly in LABELLED containers. See HSU ML Staff to obtain the proper container. Labeled Hazardous Material is stored in the yellow shed outside room # 116, in the back parking lot. See the [policy manual](#) on the website.
6. Boats: Use of HSU ML boats requires completion of a Boating Safety Class, and an approved Cruise Plan. Obtain the [cruise plan](#) from an HSU ML staff person or the website.
7. Projects: If you put something in an aquarium, tank, tray, wet table, refrigerator, desiccators or freezer is must be labeled. Label it or Lose it, unmarked items or projects will be thrown out. Clean up your mess, the lab techs are not paid to clean up after you. You are responsible for the care and feeding of all animals you bring into the lab.
8. You must break down your project when it is finished, clean all glassware, aquariums etc. The HSU ML staff will help you get started. See the [policy manual](#) on the website.
9. Do not put sand, mud or debris down the sink drains. There is a dump site outside adjacent to the bushes opposite the front parking lot.
10. First Aid: Kits are located in rooms 110 and 121 to the right of the door. Eyewash stations are in all lab rooms. The emergency shower is in room 112, hand sprayers are in: Rooms 110, 111, and 112A. See the [policy manual](#) on the website.
11. **After Hours: emergency problems with building or seawater system call:
Dave Hoskins: 442-3370 or Grant Eberle: 839-4814 or HSU Plant Ops: 826-3646
Police: local 9 -911 or HSU campus 826-5555.**

Copies of HSU ML Forms

These forms are all available at the [HSU ML Website](#) or from the HSU ML offices.

1. Research Project Description



Humboldt State University Marine Lab Research Project Description for use of Labs and Wet Labs

Return completed form to HSU ML Director : *L. Scott Quackenbush*
PO Box 690 Trinidad CA., 95570 707-826-3671

Submit by Email

Print Form

Name of User

Home Address

Home Phone Number Email Address

HSU Faculty Advisor for this project

Project Title

CA. Collection Permit #

Check boxes that Apply Faculty Research Graduate Thesis Project Senior Project HSU Course Project

HSU Course #
Course Title

List Equipment and Space Required
List : Tanks, aquaria
work space
supplies
chemicals
ML staff help
Add pages as needed

Start Date Finish Date

I have read the Marine Lab Guidelines for Use, and have filled out this form completely. I understand the rules and have saved a copy of the guidelines. Upon completion of the project I will clean tanks, trays, aquaria, and all spaces used.

Current Date Signature of User:



Humboldt State University Marine Lab
Research Project Description
for use of Labs and Wet Labs
Return completed form to HSU ML Director : L. Scott Quackenbush

Objectives

Methods

**Species of
Plants or
Animal used
in Research**

IACUC Form submitted for Vertebrate Animal use.

**Special Notes
Special Needs**

Attach a copy of your proposal or abstract if available

Current Date

Final Report Submitted :

Approved by

2. R.V. Coral Sea Cruise Request form

Humboldt State University Marine Laboratory
R.V. Coral Sea Cruise Request Application 2007-2008

Submit by Email
Print Form

HSU Faculty : Submit one copy of this form via email by August 24, 2007 for any teaching cruise for the Academic year of 2007-2008 (Both Fall and Spring Semester). All other users: Please submit form as soon as practical to allow for scheduling, but no later than 30 days prior to cruise date. Include HSU Account # for all grants or contracts. Outside users must file a billing address. If you have problems with the form or need direct help contact :

Dr. Scott Quackenbush, Director, HSU Marine Lab, PO Box 690, 570 Ewing Street
Trinidad Ca, 95570 707-826-3671 quackenbush@humboldt.edu

Chief Scientist Name :			
Email Address:			
Phone Number:			
Course Title:			
Course Number:	Enrollment:		
Depart Date:	Depart Time:		
Return Date:	Return Time:		
Cruise Objectives:			
Equipment Required:			
Operational Area or Station List by Lat/Long			
HSU Grant Account # :			
Billing Address:			

Edition : 6.25.07

Current Date	6/28/07	Submitted	
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3. Release and Consent Agreement: Liability Waiver form.



Humboldt State University
RELEASE AND CONSENT AGREEMENT

Submit by Email

(Assumption of Risk/Health Statement/Liability Waiver)

NOTICE: THIS WAIVER IS A CONTRACT WITH LEGAL CONSEQUENCES. READ IT CAREFULLY BEFORE SIGNING. IF THERE ARE ANY QUESTIONS CONCERNING THIS DOCUMENT, CONTACT THE HUMBOLDT STATE UNIVERSITY MARINE LABORATORY DIRECTOR (707) 826-3671. THIS INFORMATION MUST BE PROVIDED TO THE MARINE LABORATORY DIRECTOR PRIOR TO USING HSU MARINE LABORATORY AND OR THE R.V. CORAL SEA.

In consideration of being allowed to participate in the campus activity described as :

On Date :

At Location :

I hereby freely agree to make the following contractual agreements:

I understand that such activity, including my operation of equipment necessary for participation in the activity, may expose me to certain risks of injury, death, or damage to my property. I am knowledgeable of the risks of this activity, and other risks and dangers which may occur, including but not limited to hazards of travel, accident, illness, or acts of God. I also understand and agree that situations may arise during an activity, which may be beyond control. I fully realize the dangers of participating in an activity of this type and voluntarily assume all the risks associated with such participation. In consideration of my acceptance as a participant, I hereby release, forever discharge, and hereby hold Humboldt State University, the Trustees of The California State University, the State of California, its officers, agents, employees, auxiliaries, or other participants harmless from any and all claims, liabilities, suits, or damages which I might have or claim to have against Humboldt State University, the Trustees of The California State University, the State of California, its officers, agents, employees, auxiliaries, or other participants for injuries to my person, including death, or property damage, arising out of my participation in this activity. This contract shall serve to indemnify the above-named parties should the same be liable or found guilty of negligence as a result of court action. I also agree to indemnify, defend and save harmless Humboldt State University, the Trustees of The California State University, the State of California, its officers, agents, employees, auxiliaries, or other participants from any and all claims and losses accruing or resulting to any person, firm, or corporation who may be injured or damaged by any of my negligent actions.

I have read and understand.

Initial Here

I agree that it is my sole responsibility to be familiar with the physical and/or mental demands associated with the above-named activity. With these demands in mind, I hereby declare that I am physically capable of participating in the above-named activity, and that I have no physical or medical condition which, to my knowledge, would interfere with my ability to participate in this activity or endanger myself or others if I participate in this activity. I also agree to abide by any established rules or regulations while participating in this activity. I also agree that Humboldt State University or the State of California will not compensate me for my participation in this activity.

I have read and understand.

Initial Here

In the event of accident or illness of an emergency nature, and because I may be unable to select or approve the required medical treatment, I hereby authorize event organizers, or representatives of Humboldt State University to arrange for such care as is available and necessary; and do further release and forever discharge the providers of such care and Humboldt State University, the Trustees of the California State University, the State of California, and its officers, agents, employees, auxiliaries from any and all claims, demands and causes of action arising out of said authorization.

I have read and understand.

Initial Here

1. Please list any past or present illnesses, conditions, injury, or physical disabilities, or any other health problem or physical limitation you have which limits your participation in any way. (If there is any doubt whatsoever about your ability to safely participate in this activity, you should have a physical examination by a physician).

2. Please list any allergies or medical alert information:

3. Notify in case of emergency

Relationship Home / Work Phone

4. My medical insurance carrier is:

5. Any prescription medications you are currently taking:

I am aware that: (1) Humboldt State University supports the Federal "ZERO TOLERANCE POLICY" which strictly enforces the prohibition in all facilities and vessels of illegal drugs (narcotics, marijuana, stimulates or other similar controlled substances) and that my violation of this policy could lead to termination of the voyage and my arrest by Federal authorities; (2) alcoholic beverages, including beer and wine, are prohibited at all times; (3) there is no expert medical service on board HSU vessels; (4) Federal regulations require Humboldt State University to request that I submit to a drug/alcohol test should I be involved in a "Serious Marine Incident"; and that my failure to submit to this test, if requested, will require Humboldt State University to report my name and address to the U.S. Coast Guard AND TO MY PARENT INSTITUTION.

I have read and understand. **Initial Here**

I HAVE CAREFULLY READ THIS FORM AND FULLY UNDERSTAND ITS CONTENTS. I AM AWARE THIS IS AN ASSUMPTION OF RISK, A HEALTH STATEMENT, AND A LIABILITY WAIVER. IT IS AN AGREEMENT TO RELEASE FOR NEGLIGENCE AND A CONTRACT BETWEEN THE UNDERSIGNED AND HUMBOLDT STATE UNIVERSITY.

I have read and understand. **Initial Here**

Participant's Full Name

Mailing Address : Street, City, State Zip

Position : Please check a box HSU Faculty HSU Staff HSU Student HSU Observer Non -HSU User

Employer Name Relationship to participant

Contact Person Phone Number

Address: City, State, Zip

Participant Signature Date

IF THE PARTICIPANT IS UNDER 18 YEARS OF AGE, THE UNDERSIGNED PARENT OR LEGAL GUARDIAN HEREBY EXECUTES THE ABOVE RELEASE AND CONSENT AGREEMENT ON BEHALF OF HIS/HER MINOR CHILD FOR THE ABOVE-NAMED ACTIVITY.

Parent/Guardian Signature _____ Date _____

Submitted :

[Print Form](#)

4. R.V. Coral Sea Cruise Report form



**Humboldt State University Marine Lab
R.V. Coral Sea Cruise Report**

Submit by Email
Print Form

Please fill out the Cruise Report and file with the Captain or email to Director before leaving the vessel

Cruise date	<input type="text"/>	Chief Scientist	<input type="text"/>
Meeting Time	<input type="text"/>	Return Time : Inc luding Unload and Clean up	<input type="text"/>
Course Number	<input type="text"/>	Course Title	<input type="text"/>
Was this a Required Cruise	<input type="text"/>	# students enrolled in course	<input type="text"/>
Summary Project Description	<input type="text"/>	# enrolled students on cruise	<input type="text"/>
		# student observers on cruise	<input type="text"/>

Summary of Cruise :
Include General locations,
Gear Used,
Specific Objectives

Remarks and
Suggestions
for Improvements

Signature of Chief Scientist	<input type="text"/>	Date	<input type="text"/>
E. Signature Chief Scientist	<input type="text"/>		
R.V. Coral Sea Captain	<input type="text"/>	Date	<input type="text"/>
E Signature of Captain	<input type="text"/>	Today's Date	<input type="text" value="6/28/07"/>

Print Form
Submit by Email

5. Collection Record Form.



Humboldt State University Marine Lab: Collection Record

Submit by Email

Print Form

R.V. Coral Sea Cruise #

Today's Date

Project Name

HSu Department

Gear Used

Location

Time Net Set Time Net Picked Depth in Meters

Boat Speed Kts. Compass Heading Sea State

Wind Direction Wind Speed Air Temp.

Water Temp Salinity Oxygen

Latitude Net Set Longitude Net Set

Latitude Net Picked Longitude Net Picked

Species Collected

Notes

Collector Name CA. Permit #

Species Retained

Special Notes

Print Form

6. Truck Request and Boat Request form.



Humboldt State University Marine Lab Small Boat Float Plan and Equipment Request

Submit by Email

The cruise plan must be completed to reserve the truck, boat and motor. File this form with the Boat Safety Officer, Steve Monk, at the Marine Lab at least **seven days in advance of the planned trip**. Please also cancel the equipment request and reservation if the cruise is cancelled. Uncanceled cruises will be charged to funded projects. If you have questions or trouble with the form call : Steve Monk at 707-826-3686.

Depart Date and Time		Return Date and Time	
Boat Operator Name Address Phone Number			<input type="checkbox"/> Safety Course Completed HSU Dept.
Faculty in Charge		Project Name	
HSU Account #			
Other Boat Operator: Name and Phone #			<input type="checkbox"/> Safety Course Completed
Other Boat Operator: Name and Phone #			<input type="checkbox"/> Safety Course Completed
Truck Driver: Name and Phone #			<input type="checkbox"/> Defensive Driving Course

Truck Driver is State Employee
 Truck Driver is Registered Volunteer

Persons on Board: Listed by Name	
ML Equipment Requested	
Boat launch Site	
OperationsArea: List Stations or Lat. / Long.	

Current Date 9/4/07

Activities Planned
be specific as practical

HSU Course # and Course Title :

Required Safety Gear Check list :

Lifejackets for each POB ____ Throwable PFD ____ Anchor ____ Paddles ____ Dock Lines ____

Sound Device ____ Compass ____ First Aid Kit ____ Flashlight ____ Flares ____

Bailer ____ Fire Extinguisher ____ Distress Flag ____ Stern Plug ____ Prop Kit ____

Kill Switch Key ____ Emergency Blanket ____ VHF Radio ____ GPS ____ Chart ____

Copy of Float Plan Filed with Marine Lab ____ VHF Monitor Channel 16 and Channel ____

Special Requests or Information

The Boat Operator will : 1. Clean and Rinse Boat and Trailer; 2. Flush engine with Fresh Water; 3. Return all gear to proper storage; 4. Clean inside and outside and bed of truck; 5 .Report to Steve Monk all equipment problems with Boat, Engine or Trailer and Truck. I have read all the Boat Safety Guidelines and this form and I agree to abide by all these rules and guidelines

Signature of Boat Operator

Faculty in Charge : I have fully reviewed this form, the students listed above are qualified to do the work described in a safe manner. I recognize I am responsible for the safety of the students while conducting this work. I will reimburse the Marine Lab for all lost, broken or destroyed equipment.

Signature of Faculty in Charge :

Steve Monk, BSO, approved :

Liability Waivers filed for all POB

Print Form

Submit by Email

HSU Marine Laboratory Annual Report of Activities 2008

Submit by Email

Print Form

Classroom and Lab Teaching

Fall 2006

Course Prefix and Number ML Room # Enrolled

Course Prefix and Number ML Room # Enrolled

Spring 2007

Course Prefix and Number ML Room # Enrolled

Course Prefix and Number ML Room # Enrolled

HSU Marine Lab

Please provide comments, suggestions, changes required for next time. Please make specific suggestions about what needs to be changed to make the labs more useful.

R.V. Coral Sea

If you used the RV Coral Sea for a class field trip, please comment on the usefulness of the vessel, the equipment and the crew. Please make suggestions for improvements. Indicate which Course and what day your trip occurred.

Student Projects

Please comment on support of Undergraduate and Graduate student research projects. Indicate by name and topic which projects were conducted this year. Make any suggestions for improvements

HSU Marine Laboratory Annual Report of Activities 2008

Submit by Email

Print Form

Research Activities

Grant Funded Projects at HSU ML or RV Coral Sea

Name of Investigator Agency Year it will End

Title of Grant, and a brief update on progress

Name of Investigator Agency Year it will End

Title of Grant, and a brief update on progress

Name of Investigator Agency Year it will End

Title of Grant, and a brief update on progress

Publications

Please give full citations of publications from work done at HSU ML. List in press or submitted.

Graduate Students Completed

Please list : Name of Student, Title, of M.S. thesis defended and completed in 2006-2007

Graduate Students In Progress

Please list : Name of Student, Title, of M.S. thesis work , for students working at HSU ML 2006-2007

HSU Marine Laboratory Annual Report of Activities 2008

Submit by Email

Print Form

Service

Please describe any service activities that you used the HSU ML to support:
Such as tours, recruitment of students or faculty

General Comments HSU ML

Please provide a brief description of future projects planned for HSU ML.

Please make any additional suggestions or comments about the HSU ML and its operations, staff, and equipment

General Comments : R.V. Coral Sea

Please provide a brief description of future projects planned for R.V. Coral Sea.

Please make any additional suggestions or comments about the R.V. Coral Sea and its operations, staff, and equipment

Current Date

6/28/07

Date Submitted

Signature