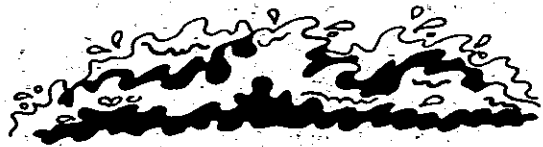


The University of Georgia Marine Extension Service

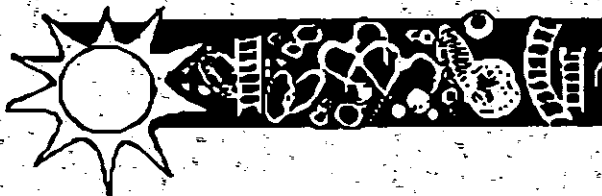
Marine Notes



Marine Notes Series No. 3

MARINE BIOLOGY AS A CAREER

By Maryellen Timmons, Ph.D.



Many students are interested in a career in marine biology because of their love of the ocean, or their passion for marine mammals and sea turtles. As glamorous as it may sound, the truth is jobs in the field of marine mammal science or marine herpetology are few, and competition for them is extremely tough. Although their love for the marine environment may be genuine, those wishing to venture into the field of marine biology may be severely disappointed with their job options if they are thinking only of whales and turtles. The reality of what marine biologists do in their jobs is very different from the general public's perception. Becoming a marine biologist is serious business and requires a strong educational background. However, you do not need a degree in marine biology to be stewards of our oceans! If you are genuinely concerned about the status of our world oceans, there are many groups you can join through which you can do your part to ensure clean and healthy oceans for our future.

WHAT IS MARINE BIOLOGY?

By definition it is the study of the biology of marine organisms. The field of marine biology has grown so rapidly and become so diversified that it is not possible to define it briefly. While some marine biologists study the genetic makeup of deep sea organisms, others may spend considerable time at sea taking samples and battling rough weather in small shipboard laboratories. Because of the collaborative nature of many science projects, today marine biology has worked its way into virtually all fields of scientific endeavor. That's right..... scientists! Most people don't realize that first and foremost marine biologists are scientists, most of whom have graduate degrees.

The daily routine of a marine biologist may involve computer work, statistical design and analysis, writing grants, planning research projects, designing and repairing equipment, traveling to research sites, and teaching. As you can imagine, schedules like this often exceed a 40-hour work week. This brochure was designed to help you find information on the wide variety of career options in marine biology. Here are a few hints on how to plan your career in marine biology:

1. Picture what you want to be doing in your future. You really must take the time now to be realistic

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and decide what type of work appeals to you. Some career options are: government worker, marine policy maker, research scientist, laboratory technician, teacher, or professor (conducts research and teaches). Among the possible places to work are government agencies, such as fish and wildlife services, the National Oceanographic and Atmospheric Administration (NOAA), universities, laboratories, museums, aquariums, and onboard ships. If you are intent on working with marine mammals or sea turtles, consider alternate ways to enter the field such as becoming a veterinarian or biologist that specializes in mammals or reptiles, studies genetics of animal populations, or specializes in diseases and parasites of these organisms.

2. Research your career choice to determine what educational background or training you will need. Call or write to places you would like to work and ask them what the job requirements are for the position you would like.

3. Go to school! If you are in elementary, middle, or high school, study hard and get good grades. Take all the math, science, biology, and English courses you can. Yes, marine biologists need good math and writing skills. Some positions may not require a college degree, but you must also realize that the pay scale will reflect that, and your chances of promotion may be less if you do not have a college degree.

4. If you are in college, or plan to attend, I would highly recommend that you obtain a bachelors degree in biology rather than marine biology. Why? A bachelors degree in biology will give you much needed background in technological skills that are

required for many positions. A degree in marine biology does not guarantee you a job, and many bachelors programs give you an overview of the field so you have no special skills upon graduation. You should really specialize in marine biology in a masters degree program. Of course, as you receive more education, you also increase your marketability, along with pay scale increases.

5. If you really want to be a marine biologist, you can! Plan ahead, study hard, and don't give up!

Dr. Timmons is a Public Service Assistant at the Education Unit of The University of Georgia Marine Extension Service

(The following information is current as of January 1997. The resources provide information on types of careers, advice on applying to schools, and career preparation. Words in italics provide a brief description of the information contained within each reference. The references are listed according to appropriate age levels.)

ELEMENTARY

You can be a woman marine biologist (1992)
ISBN: 1-880599-06-6

You can be a woman oceanographer (1993)
ISBN: 1-880599-14-7

(These books contain stories of women biologists and describe what it takes to be a biologist.)

Both books are available through Cascade Pass Inc.
Suite 235 10734 Jefferson Blvd. Culver
City CA 90230-4969 (price \$6) Ph. (310) 202-1468

MIDDLE SCHOOL, JUNIOR HIGH, HIGH SCHOOL, COLLEGE, EDUCATORS,

COUNSELORS, AND PARENTS

(see also internet sites)

Marine Science Careers: A Sea Grant Guide to Ocean Opportunities 1996 (This is a highly recommended guide and provides interview responses from diverse persons working in the marine field.) Available from Sea Grant Programs nationwide.

Write to: WHOI Sea Grant Program MS #2 193 Oyster Pond Rd. CRL 209 Woods Hole MA 02543-1525 (Price \$5) Ph. (508) 289-2398 Or: Louisiana Sea Grant LSU Wetland Resources Building Baton Rouge LA 70803 (Single copies free upon request, LA only) Ph. (504) 388-6448 Or: Publications Virginia Sea Grant Marine Advisory Services Virginia Institute of Marine Science PO BOX 1346 Gloucester Point Virginia 23062 (Price \$5) Ph. (804) 642-7170

Marine Biologists (This four-page pamphlet provides an overview of employment opportunities, salaries, qualifications, and education information. Recommended.) Pamphlets are available for a variety of careers (e.g., oceanography, genetics, zoology, etc.). You may write or call for a list of pamphlets on careers in science. (price \$2) Write to: Chronicle Guidance Publications Inc. 66 Aurora Street P.O. Box 1190 Moravia NY 13118-1190 Ph. (800) 622-7284 FAX: (315) 497-3359

Women in Science...Good Girls Don't By Lee Anne Campbell. (An article about careers in marine science/oceanography from NOR'EASTER Fall 1990.) (Price \$1) Write to: WHOI Sea Grant Program MS #2 193 Oyster Pond Rd. CRL 209 Woods Hole MA 02543-1525 Ph. (508) 289-2398

Marine Careers: The Scientist A Delaware Sea Grant MAS NOTE By William R. Hall and Elizabeth A. Chajes. (This pamphlet provides a description of careers available in the marine sciences. Good overall reference.) (single copies free) Available from the University of Delaware Sea Grant College Program Marine Communications Office Newark DE 19716 Ph. (302) 831-8083

Coast Notes A series of two-page articles on: Careers in Marine Biology, Careers in Resource Management, Planning, Policy Making, and Law, Careers in Ocean Engineering, Careers in Physical and Chemical Oceanography, Technical Careers, and Careers in Medicine and Health (Each article gives an overview of careers available in that particular discipline of marine sciences.) (single copies free) Write to: Sea Grant College Program University of Puerto Rico RUM-UPR P.O. BOX 5000 Mayagüez Puerto Rico 00681-5000 Or: Virgin Islands Marine Advisory Services (VIMAS) University of the Virgin Islands Eastern Caribbean Center St. Thomas USVI 00802 Ph. (809) 774-3004

HIGH SCHOOL, COLLEGE, TEACHERS, COUNSELORS, AND PARENTS

Education and Training Programs in Oceanography and Related Fields 1995 (This excellent guide is an overview of colleges, technical, and research institutes with contact numbers and program descriptions. Highly recommended.) (price: \$6) Write: Marine Technology Society 1828 L Street NW Suite 906 Washington DC 20036 Ph. (202) 775-5966

ALL AGES

All about oceanography: a fun-filled activity book By Tracey I. Crago and Lee Anne Campbell This book contains a coloring section and text sections with a variety of activities suitable for K-12. (price \$2: special educator discounts) Write to: WHOI Sea Grant Program MS #2 193 Oyster Pond Rd. CRL 209 Woods Hole MA 02543-1525 Ph. (508) 289-2398

INTERNET ACCESS INFORMATION

University of Georgia, Marine Extension Service:
<http://www.marsci.uga.edu/EXT/MAREX.html>
(Our website tells you about our educational programs for teachers and students. Call or write for information on our year-long Sea Grant Marine Education teaching internships.)

CORE: Consortium for Oceanographic Research and Education:

<http://core.cast.msstate.edu>

(CORE is a Washington, DC based association of oceanographic institutions. With this site you can access member institutions to find information on careers, educational backgrounds of members, and employment opportunities.)

Grice Marine Biological Laboratory:

<http://www.cofc.edu/~grice/grice.htm>

(Grice Laboratory is located in Charleston, SC. This site describes various faculty research interests, and has a section describing what marine biologists do.)

Careers in Marine Science:

<http://oceanlink.island.net/career2.html>

(This is an excellent source of information for students of all ages, teachers, counselors and parents!)

NOAA's Resource Guide for Teachers of

Marine Science: <http://swfsc.ucsd.edu/BIBLIOGRAPHY/GUIDE/.htm>

(This website contains an absolutely wonderful resource guide for any science teacher or parent! Text resources are listed by grade level and suggestions are given for lesson plans, videos, films, and CD-roms for classroom use. Also listed are environmental jobs for high school and college students, as well as permanent education positions. Highly recommended.)

Marine Education: A Bibliography of Educational Materials Available from the Nation's Sea Grant Programs:

<http://www.noaa.gov/public-affairs/sgint.html>

(This website contains a list of educational materials available from various Sea Grant Colleges across the nation. The list can be downloaded off the internet. Hard copies of this listing are available from your state Sea Grant office for a small fee.)

Strategies for Pursuing a Career in Marine Mammal Science:

<http://www.rtis.com/nat/user/elsberry/marspec/mmstrat.html>

(This resource is great for all ages, and answers some of the most commonly asked questions about careers in marine mammal science.)

Louisiana Sea Grant home page:

<http://www.lsu.edu/guests/wwwosgd>

(Louisiana Sea Grant provides a description of marine advisory services, education, and fellowships available.)

Southeastern Sea Grant regional home page:

<http://gmv.ifas.ufl.edu/~seaweb/homepage/regional.htm>

(This regional Sea Grant website provides a description of Sea Grant's purpose as well as lists of, and information on, all Southeastern Sea Grant facilities.)

Sea World/ Busch Gardens:

<http://www.bev.net/education/SeaWorld/homepage.html>

(Sea World's website provides information on careers in animal care, veterinary science, and animal training, educational resources, Career camp information for grades 9-12, and summer internships for sophomores.)

Guide to Zoological Park Careers:

http://www.bev.net/education/SeaWorld/Zoo_Careers/zoocareers.html

(This career website describes positions and necessary backgrounds for zoological park careers. It also has interview results, including advice on careers from current animal park employees.)

Layout:

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