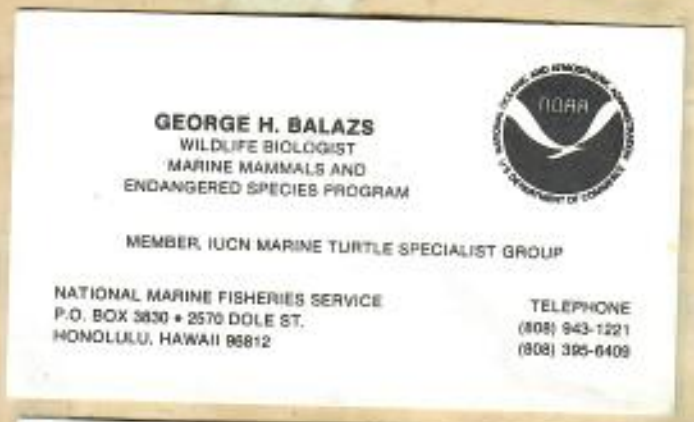
1970s-1990s G.H. BALAZS WORK AND AWARDS FILE

UH-Manoa
GEORGE H. BALAZS
>1976-1977
+

HIMB & NMFS



GEORGE H. BALAZS
WILDLIFE BIOLOGIST
MARINE MAMMALS AND
ENDANGERED SPECIES PROGRAM

MEMBER, IUCN MARINE TURTLE SPECIALIST GROUP

NATIONAL MARINE FISHERIES SERVICE
P.O. BOX 3830 • 2570 DOLE ST.
HONOLULU, HAWAII 96812

TELEPHONE
(808) 943-1221
(808) 395-6409

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NOTE

THE COMPLETE APPLICATION FORM
MUST BE GIVEN TO THE APPLICANT

PROMOTION APPLICATION FORM
UNIVERSITY OF HAWAII AT MANOA
1976-1977

PART I. To be completed by the Chairman/Unit Head **before** issue.

Name of Applicant ____George H. Balazs____

Department or Unit* ____Hawaii Institute of Marine Biology____

Initial UH Appointment: Rank/Step** ____R2-3____ Date ____10-01-71____

9 ________ or 11 ____x____ month appointment initially.

Present UH Appointment: Rank/Step** ____R2-8____

9 ________ or 11 ____x____ month appointment now.

*If the applicant has a split appointment, or a joint appointment, please complete page 1.2.

**Please use symbols; e.g., I4-D or R3-6.

Consideration is (check one):

A. Appropriate since the applicant is (1) in the seventh year of creditable service in his/her present rank or (2) has completed at least three years of creditable service in rank and is now in Step 8 or above in that rank. (Check (1) /_/ or (2) /x/)

B. At the request of the applicant /_/

C. At the request of:

1. Department or unit chairperson /x/
2. Dean /_/
3. Chancellor /_/

Signature of Chairperson/Unit Head ____[signature] for John E. Bardach____ Date ____12/3/76____

9/76

PROMOTION APPLICATION Name of Applicant George H. Balazs

1. Split appointment. (College of Tropical Agriculture only)

A split appointment is one in which the applicant receives payment for his/her services from more than one account code from within the College of Tropical Agriculture, other than for administrative services. List the applicant's division of funding:

Year	% Instruction	% Research	% Extension
1975-76			
1974-75			
1973-74			
1972-73			
1971-72			
1970-71			

2. Joint appointment.

A joint appointment is one in which the applicant receives payment for his/her services from more than one account code, exclusive of split appointments as defined above. (Examples: joint instructional/research appointments; joint instructional/ administrative appointments; joint instructional appointments in two or more departments, etc.)

List the applicant's joint appointments, identifying the departments and units and the percentage of time paid for from the separate accounts:

Year	Dept./Unit, % Payment	Dept./Unit, % Payment
1975-76		
1974-75		
1973-74		
1972-73		
1971-72		
1970-71		

IF MORE THAN ONE DEPARTMENT OR UNIT IS INVOLVED EACH DEPARTMENT OR UNIT MUST REVIEW THE APPLICATION (SEE INSTRUCTIONS). THE CHAIRPERSON OR UNIT HEAD OF THE PRIMARY DEPARTMENT MUST NOTE HERE WHETHER THE APPLICANT IS SUBMITTING MORE THAN ONE APPLICATION, AND NOTE THE TWO OR MORE ROUTES THAT THE APPLICATIONS WILL TAKE. INDICATE THE PLACE (DEAN'S OR CHANCELLOR'S OFFICE) WHEREIN THE DOSSIERS MUST BE INTEGRATED.

Primary routing:

Secondary routing:

Integration point:

PROMOTION APPLICATION

Name of Applicant George H. Balazs

Employment history: Give, in reverse chronological order, dates of significant personnel actions. These include award of tenure, prior promotions, sabbatical leaves, leaves without pay (indicate purpose), study leaves, and periods of broken service.

Date	Personnel Action
July 1, 1974	Pay adjustment - award of one step
October 1, 1971	Initial date of hire as Jr. Marine Biologist at the Hawaii Institute of Marine Biology
July 1, 1969	Completion of M. S. degree - termination of assistantship
June 1, 1967	Initial date of hire as graduate research assistant (1/2 time) in Animal Sciences Dept.

PROMOTION APPLICATION

Name of Applicant George H. Balazs

PART II. TO BE COMPLETED BY APPLICANT.

A. I have read Article V, "Promotion," of the UHPA-University contract and "Instructions for Applicants for Promotion, 1975-76."

Signed George H. Balazs Date 10/26/76

B. I requested consultation with my department/unit chairperson regarding my promotion application and (check as appropriate):

1) I did consult with him/her. ☒

2) I was not able to consult with him/her (give reasons). ☐

3) I did not request consultation. ☐

Signed George H. Balazs Date 10/26/76

C. Please sign one of the following statements:

1) I hereby apply for promotion and certify that I have received a copy of the authorized criteria for promotion appropriate to my application and that I understand these criteria.

Signed George H. Balazs Date 10/26/76

2) I have received a copy of the authorized criteria for promotion appropriate to my application, I understand these criteria, and do not wish to be considered for promotion.

Signed _____ Date _____

PROMOTION APPLICATION Name of Applicant George H. Balazs

PART III. TO BE COMPLETED BY APPLICANT.

A. Degrees

	Kind	Subject Field	Institution	Date
Baccalaureate	B.S.	Animal Sciences	University of Hawaii	June, 1967
Master's	M.S.	Animal Sciences	University of Hawaii	June, 1969
Doctoral				

Foreign or Other Degrees and Professional Licenses:

Kind	Subject Field	Institution	Date

B. Graduate Credits, Post-Doctoral Work, etc., since Last Degree Completed:

Institution	Date	Field	Credits

C. Prior Experience: Please list with dates, in reverse chronological order beginning with your affiliation with the last institution or organization before coming to UHM. Include teaching in public or private schools below college level; college or university instruction; research positions; and other professional experience.

PROMOTION APPLICATION

Name of Applicant George H. Balazs

PART III. (continued)

C. List of Courses Taught (If courses taught through CCECS or Summer Session are included, please indicate this; if not at UHM indicate where.)

Academic Year	Dept. Course Number	Course Title	Crs.	Total Contact Hours	Approx. No. of Students
Fall '75					
Spring '75					
Fall '74					
Spring '74					
Fall '73					

(Continue on separate sheet (p. 3.3) if necessary)

Applicant's Signature_____ Date_____

Reviewed by Chairperson/Unit Head for accuracy of information in Section D above:

Name_____ Signature_____ Date_____

PROMOTION APPLICATION

Name of Applicant George H. Balazs

PART IV. ENDEAVORS (to be completed by applicant)

NOTE

List concisely and separately each of your activities under as many of the following categories as they apply to you. See "Instructions for Applicants for Promotion, 1975-76" for examples of activities in each of these categories. Use additional pages as necessary, numbering them and identifying each with your name.

NOTE

1. Statement on accomplishments. Please attach statements on your accomplishments in any of the following categories:

(Check boxes as appropriate)

(1)	Teaching	☐
(2)	Research	☒
(3)	Community Service	☒
(4)	Other appropriate activities (for faculty not engaged in instruction)	☒

2. Teaching evaluations. List below any evaluations of your teaching which you are submitting and identify them by page number (4.____ to 4.____).

3. Bibliography. If you are submitting a bibliography, please read the Instructions carefully before submission and indicate the page numbers (4.5 to 4.6).

4. Other materials. If you wish to submit other materials in support of your application (such as details of research/training/service grants or contracts, reviews of your work, independent evaluations of your activities, etc.), please list below and identify by page number (4.7 to 4.16).

memo from S. V. Smith (4.7)

notes from D. F. Alderdice (4.8)

letter from J. Rolles (4.9)

letter from H. W. Kent (4.10)

letter from R. B. Gorrell (4.11)

letter from F. J. Radovsky (4.12)

letter from G. R. Ariyoshi (4.13)

letter from D. F. Alderdice (4.14)

letter from R. B. Herrick (4.15)

letter from A. J. Mence (4.16)

Pagination. To avoid loss of materials during transmission to the various reviewing bodies, each additional page should be numbered (4.2, 4.3, etc.). Pagination should be sequential and complete. Note here the final page number of your submission, 4.16.

PART IV. ENDEAVORS

1. Statement on Accomplishments

A. Research

1. For the years 1972-1975, contributions were made to the planning and preparation of annual proposals which resulted in support for aquaculture nutritional research of crustaceans and marine turtles. Working with colleagues, I conducted original investigations into these topics which resulted in eight publications; six of these appeared in refereed and respected scientific journals. In addition, one publication (No. 13 in Bibliography) received high commendation from the journal editor (see pages 4.7-4.8).

2. In 1973, I planned and prepared a proposal which resulted in approval from the Commander, Vandenberg Air Force Base, California, to conduct a survey of marine turtles at Canton Atoll, Phoenix Islands. This research resulted in a publication in a respected journal issued by the Smithsonian Institution (No. 9 in Bibliography).

3. For the years 1974-75 and 1975-76, I planned and prepared proposals which resulted in support for original research of the reproductive biology of the green sea turtle colony at French Frigate Shoals, Northwestern Hawaiian Islands. Support was derived from the U. S. Fish and Wildlife Service and totaled $2,900 for 1974-75 and $2,350 for 1975-76. This research has thus far resulted in four publications, one of which appeared in a refereed and highly respected scientific journal (No. 11 in Bibliography).

4. For 1976-77, I planned and prepared a proposal which resulted in support from the State Marine Affairs Coordinator for a comprehensive green sea turtle management study in the Hawaiian Islands (RCUH project no. 431). Support for year one of this research totals $16,500, with equivalent annual amounts anticipated through 1978-79.

B. Service

1. Community:

a. In 1972-73, two guest lectures on marine turtles and aquaculture were given to elementary school classes.

b. Since 1973, nine guest lectures on marine turtle biology have been given to community organizations (see pages 4.9-4.10).

c. Since 1973, six testimonies on marine turtles and aquaculture have been presented to committees of the Hawaii State Legislature.

d. Since 1973, five testimonies on marine turtles and aquaculture have been submitted to the U. S. Department of the Interior and Department of Commerce (see page 4.11).

PART IV. ENDEAVORS

1. Statement on Accomplishments

e. In January, 1973 testimony on marine turtles and aquaculture was presented to the Governor's Animal Species Advisory Commission (see page 4.12).

f. In May, 1974 a dossier on marine turtles and aquaculture was transmitted to the Governor's Office, State of Hawaii (see page 4.13).

g. Since April, 1976 I have served as an unpaid marine turtle consultant to the non-profit environmental organization Monitor, Inc.

2. Professional:

a. Since October, 1975 I have reviewed four manuscripts on crustacean nutrition for the highly respected scientific journal, Aquaculture (see page 4.14).

b. In February, 1976 I reviewed a $6,100 marine turtle research proposal for the World Wildlife Fund, Washington, D. C.

c. In 1973-74, four course lectures on aquaculture were presented in the Animal Sciences Department (see page 4.15). In October, 1976 a course lecture on marine turtle biology was presented in the Zoology Department.

d. In 1974 I was selected to be one of ten participants in a special meeting convened by the International Union for Conservation of Nature (IUCN) to critically examine the commercial exploitation of marine turtles and the implications of aquaculture (see page 4.16).

C. Professional Development

1. In January, 1973 I attended the World Mariculture Society Workshop and Annual Meeting in Monterrey, Mexico.

2. In January, 1973 I spent two days at the Department of the Interior's Fish Farming Experiment Station in Stuttgart, Arkansas in order to confer with research personnel.

3. In February, 1973 I attended the Pacific Aquaculture Conference at Coconut Island, Oahu and gave the presentation "Status of Turtle Culture."

4. In January, 1974 I attended the World Mariculture Society Workshop and Annual Meeting in Charleston, South Carolina and presented the paper "Effect of Protein Source and Level on Growth of the Captive Freshwater Prawn, Macrobrachium rosenbergii."

PART IV. ENDEAVORS

1. Statement on Accomplishments

5. In January, 1974 I visited Grand Cayman Island, B.W.I. for three days in order to inspect a commercial marine turtle culture operation and confer with research personnel.

6. In September, 1974 I successfully completed a three day U. S. Civil Service Commission course "Network Techniques for Project Management."

7. In September, 1974 I attended the Annual Meeting of the American Fisheries Society in Honolulu and presented the paper "Survival Status of the Green Turtle Nesting and Basking Colony at French Frigate Shoals, Northwestern Hawaiian Islands."

D. Other Activities

1. Since 1972 I have served as supervisor to a total of six long-term employed undergraduate student assistants. Supervision involved on-the-job teaching which resulted in increased knowledge and competency in marine biological research.

2. In 1973 I served as supervisor to four students enrolled in Kailua High School's Community Quest Program. Supervision involved on-the-job teaching which resulted in increased knowledge of marine biological research.

3. Since 1973 I have served as advisor to a total of four undergraduate students enrolled in the University's Marine Option Program. This resulted in the successful completion of each student's marine skill requirement for certification in the Marine Option Program.

PART IV. ENDEAVORS

3. Bibliography

Publications before initial date of hire

1. Balazs, G. H., W. I. Hugh and C. C. Brooks (1971). Composition, digestibility and energy evaluation of food waste products for swine in Hawaii. Hawaii Agriculture Experiment Station Technical Bulletin 84, 16 p.

Publications since initial date of hire

1. Balazs, G. H. (1973). A simplified method for identifying experimental shrimp. The Progressive Fish-Culturist, 35(1):26 (refereed note in scientific journal).

2. Balazs, G. H. (1973). Status of marine turtles in the Hawaiian Islands. Elepaio, J. Hawaii Audubon Society, 33(12):1-5 (article in semi-scientific journal).

3. Balazs, G. H., E. Ross and C. C. Brooks (1973). Preliminary studies on the preparation and feeding of crustacean diets. Aquaculture 2:369-377 (refereed article in highly respected scientific journal).

4. Balazs, G. H. and E. Ross (1973). Green turtles reared in captivity. International Turtle and Tortoise Society Journal, 7(1):6-9, 33 (article in semi-scientific journal).

5. Balazs, G. H., S. E. Olbrich and M. E. Tumbleson (1974). Serum constituents of the Malaysian prawn (Macrobrachium rosenbergii) and pink shrimp (Penaeus marginatus). Aquaculture, 3:147-157 (refereed article in highly respected scientific journal).

6. Balazs, G. H. and E. Ross (1974). Observations on the basking habit in the captive juvenile Pacific green turtle. Copeia, 2:542-544 (refereed note in highly respected scientific journal).

7. Balazs, G. H. and E. Ross (1974). Observations on the preemergence behavior of the green turtle. Copeia, 4:986-988 (refereed note in highly respected scientific journal).

8. Balazs, G. H. (1975). Green turtle's uncertain future. Defenders, 50(6):521-523 (article in magazine).

9. Balazs, G. H. (1975). Marine turtles in the Phoenix Islands. Atoll Research Bulletin, 184:1-7 (article in respected scientific journal).

10. Balazs, G. H. (1976). Sea turtle conservation. Elepaio, J. Hawaii Audubon Society, 36(7):79-85 (article in semi-scientific journal).

PART IV. ENDEAVORS

3. Bibliography

11. Balazs, G. H. (1976). Green turtle migrations in the Hawaiian Archipelago. Biological Conservation (Great Britain), 9:125-140 (refereed article in highly respected scientific journal).

12. Balazs, G. H. (1976). Hawaii's seabirds, turtles and seals. Dexter Press, N. Y., 32p (commercially published booklet with color plates).

13. Balazs, G. H. and E. Ross (1976). Effect of protein source and level on growth and performance of the captive freshwater prawn, Macrobrachium rosenbergii. Aquaculture, 7:299-313 (refereed article in highly respected scientific journal).

Name of Applicant George H. Balazs

COPY

UNIVERSITY OF HAWAII

Hawaii Institute of Marine Biology

March 8, 1976

To: George Balazs Personnel File

From: S. V. Smith, Acting Assoc. Director, HIMB

I attach a note from Don Alderdice to me concerning a manuscript which George and Ernest Ross have had accepted for publication in the journal Aquaculture. Of course, acceptance of a manuscript to any refereed journal is to the researcher's credit. However, it is my impression that such critical and editorial praise as Dr. Alderdice heaps on this paper is rare. I therefore am writing this memo to George's file, with a copy to Professor Ross for him to file as appropriate.

I extend my congratulations to both George and Dr. Ross for this considerable plaudit.

SVS:ec
Encl.
cc: John Bardach
√George Balazs
Ernest Ross

1345
Coconut Island · P. O. Box 1067 · Kaneohe, Hawaii 96744 / Cable Address: UNIHAW

Mr. Smith, 20 Feb 76.

From my own experience, authors often hear the worst from editors, but never the best. I'd like to share with you my admiration of this paper by George Balazs and Ernest Ross. I read quite a few papers. Few show the care and attention given design, conduct and analysis, and the resultant quality of presentation, of this paper. I suspect it will be a real winner.

As they are members of your staff, I thought you and John might appreciate this candid opinion!

Sincerely
Don A.

George!

Many thanks! I appreciate receiving your comments on this manuscript. We shall see what happens in due course.

As you know, I wrote Dr. Smith a note. I feel strongly about telling authors about high quality. Too often it seems to be all the other way. In any case, I'd rate your MS as one of the 3 best MSS I've seen in 3½-4 years of editing. Your attention to the job of doing thorough work shows through!

Don A.

Name of Applicant George H. Balazs

THE JUNIOR LEAGUE OF HONOLULU, INC.
2950 MANOA ROAD
HONOLULU, HAWAII 96822

May 16, 1976

Mr. George Balazs
Hawaii Institute of Marine Biology
Coconut Island Branch
Kaneohe, Hawaii 96744

Dear Mr Balazs,

The Junior League of Honolulu would like to say thank you once again for speaking at our April General Membership Meeting. Your fine presentation on sea turtles was fascinating and most informative. I think each member there was inspired to make a personal commitment to strive for the preservation of these sea animals.

We thank you again for contributing your time to give us a most stimulating and educational meeting.

Most sincerely,

Jean Rolles

Jean Rolles
Education Committee

Name of Applicant George H. Balazs

HAROLD W. KENT
CONSULTANT TO THE TRUSTEES
BERNICE P. BISHOP ESTATE
AND
PRESIDENT EMERITUS
THE KAMEHAMEHA SCHOOLS

Office
B. P. Bishop Estate
519 Halekauwila Street
Honolulu, Hawaii 96801
Telephone 531-1654

Residence
1451 Ohialoke Street
Honolulu, Hawaii 96821
Telephone 373-4228

April 11, 1974.

Dear Mr. Balazs.

A little belatedly I write you on behalf of the Social Science Association to thank you for the presentation you made on April 1 at the Pacific Club. You must have felt the interest that abounded both during your talk and in the foolsworth.

I believe the Star-Bulletin editorial that followed a few days later was due directly to your talk and the fact that Bud Smyser was present.

We unanimously wish you well.

Very truly

Harold W. Kent
Secretary

Name of Applicant George H. Balazs

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Washington, D.C. 20235

MAY 2 5 1976

F33/RBG

Mr. George H. Balazs
Junior Marine Biologist
Hawaii Institute of Marine Biology
P. O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

This is in response to your May 6, 1976 letter concerning the completeness of Mr. Robert Nordstrom's testimony on behalf of the National Canners Association for the public hearing record on listing certain sea turtles under the Endangered Species Act of 1973.

To date the National Marine Fisheries Service has not received the information requested of Mr. Nordstrom by the hearing panel on February 25.

Your cooperation in submitting valuable information during the status review and the public comment periods on the proposed regulations and the public hearing have been most useful and appreciated. The excellence of your biological research as well as the thoroughness and conciseness of your comments are laudable. Keep up the good work!

Sincerely,

Robert B. Gorrell

Robert B. Gorrell
Endangered Species Program Specialist

cc: R. Nordstrom, National Canners Association

Name of Applicant George H. Balazs

BERNICE P. BISHOP MUSEUM

P. O. Box 6037, Honolulu, Hawaii 96818 • Telephone 847-3511

January 3, 1973

Mr. George H. Balazs
University of Hawaii
Hawaii Institute of Marine Biology
Coconut Island
P. O. Box 1346
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

Thank you very much for your note of January 2 with the accompanying summary report on the status of marine turtles in the Hawaiian islands.

The report is very informative, includes information not previously available to me, and will be helpful in further discussion and action by the Animal Species Advisory Commission. I appreciate the amount of work that went into preparing this report. I also wish to personally thank you for your testimony at the December meeting of the Commission.

My own view at this time is that new State legislation to protect marine turtles is urgently needed.

The next meeting of the Commission is scheduled for Friday, January 12, 1973, at 1:00 PM, in the Lt. Governor's Conference Room. The turtle question is on the agenda. You are of course welcome to attend as an interested member of the public.

With best wishes,

Sincerely yours,

Frank J. Radovsky

Frank J. Radovsky
Zoologist Member
Animal Species Advisory Commission

FJR:dh

Name of Applicant George H. Balazs

EXECUTIVE CHAMBERS

HONOLULU

JOHN A. BURNS
GOVERNOR

May 24, 1974

Mr. George H. Balazs
P. O. Box 1346
Kaneohe, HI 96744

Dear Mr. Balazs:

I read with great interest the materials you transmitted by your letter of May 14, 1974, with reference to the art of green turtle farming.

Inasmuch as I have designated Mr. Frederick Erskine as Acting Chairman of the Kohala Task Force, I have taken the liberty of referring the material for his attention.

Again, thank you for sharing this information with us.

With warm personal regards, I remain,

Yours very truly,

George R. Ariyoshi

George R. Ariyoshi
Acting Governor

cc: Hon. Frederick Erskine

Name of Applicant George H. Balazs

AQUACULTURE

An International Journal devoted to Fundamental Research on Aquatic Food Resources

Editor-in-Chief (Americas)
D.F. ALDERDICE

DEPARTMENT OF THE ENVIRONMENT
PACIFIC BIOLOGICAL STATION,
NANAIMO, B.C., CANADA

FILE
NANAIMO, 19 January 1976

Dr. Stephen V. Smith, Associate Director,
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, Hawaii 96744
U.S.A.

Re: New,M.B. A review of shrimp and prawn nutrition.

Dear Dr. Smith:

I've tried to limit the material moving toward Dr. Bardach. However, I'm about to seize upon your kind suggestion that you might find some time to assist in the future!

In the present case, I wonder if Mr. Balazs might find time to give me his impressions of the enclosed review. George's work in the past has been very much along the nutrition line. The several reviews he has done in the past have been careful and complete.

The attached manuscript is a review, and so the quality of the review and its completeness are certainly points of major interest. I can do the editing for presentation and style here. I hope, from George's viewpoint, that this is a reasonable request and that he will also find the paper useful and instructive. I'm more concerned with getting a good review than one on time, and I'm quite willing to relax the review period to, say, six weeks if necessary.

I appreciate your assistance and hope George can respond. If not, return the paper at your earliest convenience. My regards to John - I trust he continues to improve!

Sincerely,

Don Alderdice

Don Alderdice

DFA:A
Enclosure

P.S. I suggest George keep this copy.

AQUACULTURE * PUBLISHED BY ELSEVIER SCIENTIFIC PUBLISHING COMPANY * AMSTERDAM

Name of Applicant George H.B.

UNIVERSITY OF HAWAII

College of Tropical Agriculture
Department of Animal Sciences

January 9, 1974

Mr. George H. Balazs
HIMB, Coconut Island
P.O. Box 1067
Kaneohe, Hawaii 96744

Dear George:

I want to express my appreciation to you for presenting your lecture "Tropical Animal Aquaculture" in our Animal Science 141 "Animals and Man" course this fall semester. As you know from the student response, your topic was of considerable interest. Your method of presentation also was excellent.

Because of the success of this lecture, which adds a whole new dimension to the role of animal agriculture in serving man, we hope that you will consider offering the lecture when we again present our course this next semester. I'll give you a call in a few days after I work up the new schedule and see if we can't continue your presentation in our program.

Thanks again for your excellent cooperation.

Best regards,

Raymond B. Herrick
Assoc. Poultry Scientist

RBH:esm

cc: J. E. Bardach
C. Brooks

Henke Hall · Room 106 · 1835 Edmondson Road · Honolulu, Hawaii 96822 / Cable Address: UNIHAW

Name of Applicant George H. Balazs

UNION INTERNATIONALE POUR LA CONSERVATION DE LA NATURE ET DE SES RESSOURCES
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

1110 MORGES, SUISSE (SWITZERLAND) ✆ (021) 71 44 01 TELEGRAMMES: UNICORN MORGES

Mr. George H. Balazs
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P. O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744
USA

13th December, 1974

Dear Mr. Balazs,

I am writing to thank you for your contribution to the recent task force meetings on sea turtle commercialisation. The meetings we held were most constructive and resulted in the formulation of a significant recommendation to IUCN.

I am now putting the finishing touches to the draft of a formal document containing these recommendations together with an account of the meeting for transmission to IUCN. I propose to send you a copy of this draft as soon as possible for your comment and any suggestion you may think appropriate to render it a better meeting record before its final submission to IUCN. Nevertheless, the most important issues and principles are sufficiently clear for IUCN to be able to be planning future action on such basis.

Your interest and assistance in this operation was greatly appreciated by IUCN and I hope that we shall continue to cooperate in an effective way in the conservation of sea turtles.

With kind regards,

Yours sincerely,

Tony

A. J. Mence
Executive Officer
Survival Service Commission

AJM/ST/1
RA/STF

cc: ACarr
THarrisson

PROMOTION APPLICATION Name of Applicant George H. Balazs

PART V. DEPARTMENT OR UNIT PERSONNEL COMMITTEE (DPC) (to be completed by DPC or Unit PC Chairperson)

Committee structure and department/unit criteria

A. Please attach the following (pages 5.6 to 5.13):

1. A statement of how the DPC was chosen, and the names, positions, and titles of the membership.
2. A copy of the duly approved written criteria that were used by the committee.
3. Details of the procedures used by the DPC.

B. Sources of assessment for teaching accomplishments

The DPC used the following sources or procedures for assessing teaching accomplishments (check as appropriate):

1. Material submitted by the candidate and included in the application. [X]
2. Other sources or procedures as follows (please detail): [X]

Note: Since Mr. Balazs is employed at HIMB primarily to carry out research, no formalized teaching of courses was either expected or carried out. However, a few course lectures were given in the Department of Zoology and Animal Science. He has supervised undergraduate student assistants, high school students, and has served as an advisor to undergraduate MOP students. This is certainly to his credit.

3. Teaching accomplishments were not assessed for the following reasons: [X]

See B.2. above.

4. DPC's assessment of the applicant's teaching accomplishments is appended in narrative form on page(s) 5.6 to 5.____. [ ]

See B.2. above.

9/76

PART V. DEPARTMENT OR UNIT PERSONNEL COMMITTEE (DPC) (continued)

Sources of assessment for research accomplishments

The DPC used the following for assessing research accomplishments (check as appropriate):

1. Review of accomplishments by committee members. [X]
2. Unsolicited testimonials as attached and listed below (identify by sender, or as "confidential A", "confidential B," etc. [X]

   a. reading and review of Mr. Balazs' publications

   b. letter of recommendation from the editor of Aquaculture (D. F. Alderdice)

3. Solicitations from referees as attached and listed below (identify by sender, or as "confidential A", "confidential B", etc.): [ ]

   None, because a reviewer from outside HIMB provides input to the DPC promotion review.

4. Applicant's research accomplishments were not assessed for the following reasons: [ ]

5. DPC's assessment of the applicant's research accomplishments is appended in narrative form on page(s) 5.14 to 5.18. [X]

PART V. DEPARTMENT OR UNIT PERSONNEL COMMITTEE (DPC) (continued)

Assessment of applicant's community service

1. Applicant was assessed on his/her service to the following committees (list): [X]

   a. IUCN meeting, 1974

2. Applicant was assessed on his/her service in professional organizations (list): [X]

   a. Aquaculture review of manuscripts

   b. World Wildlife Fund proposal review

3. Applicant was assessed on his/her service to non-University individuals or groups as follows (list): [X]

   a. Various community service efforts listed on p. 4.2 to 4.3 of his dossier.

4. Applicant was assessed on his/her service in other ways as follows (list): [X]

   a. value as a researcher knowledgeable for input of information for various reasons.

5. Applicant was not assessed on his/her service for the following reasons (list): [ ]

6. DPC's assessment of the applicant's service accomplishments is appended in narrative form on page(s) 5. 14 to 5. 18 . [X]

PART V. DEPARTMENT OR UNIT PERSONNEL COMMITTEE (DPC) (continued)

c. Assessment of other appropriate activities for faculty not engaged in instruction

1. Applicant was evaluated on his/her other appropriate activities in the following way: [X]

attachments: pages 5.14 to p. 5.18

2. Applicant was not evaluated on his/her other appropriate activities for the following reasons (list): [ ]

3. DPC's evaluation of applicant's other appropriate activities is appended in narrative form on page(s) 5._____ to 5._____. [ ]

PROMOTION APPLICATION Name of Applicant George H. Balazs

PART V. DEPARTMENT OR UNIT PERSONNEL COMMITTEE (DPC) (continued)

F. Recommendation:

The DPC's recommendation is as follows (give number of votes in each category):

5 members voted to recommend promotion

0 members voted to recommend against promotion

0 members abstained from voting

G. Certification:

I hereby certify that the DPC has considered the applicant's accomplishments in *~~(a) teaching, research, and community service as he/she is in the instructional category, or~~ *(b) other appropriate activities as he/she is not engaged in instruction category, and that the vote recorded above is correct.

Signed Jed Hirota
DPC or Unit PC Chairperson

Name Jed Hirota

Department/Unit HIMB DPC Chairman

Date 12/9/76

*Strike whichever is inappropriate.

PART V. DEPARTMENT OR UNIT PERSONNEL COMMITTEE

Committee structure and department/unit criteria

A. 1. DPC chosen per the HIMB Criteria for Evaluation and as follows: J. Bardach, Director, HIMB; S. Smith, Associate Director, HIMB; J. Hirota, Dept. Personnel Committee Chairperson; E. Reese, Prof. of Zoology, research at HIMB and knowledge of Balazs' research; E. Ross, Poultry Science - former colleague of Balazs who has most thorough knowledge of Balazs' accomplishments.

2. (attached)

3. Details of the procedures used by the DPC.

Each committee member was provided a copy of dossier as well as the HIMB Criteria for Evaluation. A written evaluation and recommendation was drawn using the three main areas of the criteria as the format for reporting. This was then submitted to the Administration Officer of HIMB. The Administrative Officer and the DPC chairperson met to total votes and summarize the evaluations.

November 14, 1975

GUIDELINES FOR PROMOTION PROCEDURES OF PROFESSIONAL TECHNICAL PERSONNEL AT THE HAWAII INSTITUTE OF MARINE BIOLOGY

Criteria for Evaluation:

Accomplishments of applicants will be considered in three categories of activities:

1. Research, past accomplishments, and prospects.
2. Education and training: largely restricted to graduate students and technicians, their supervision, and training and guidance. If the applicant is employed full time at the Hawaii Institute of Marine Biology, there will be included in this category also formal instruction endeavors, such as voluntary teaching of courses and seminars that the applicant has engaged in.
3. Service: comprised here are unrenumerated interactions with and service activities to various entities on the community, state, national, and international levels. Only service activities will be considered that bear a broad relation to the applicant's professional field.

Elaboration of these criteria is as follows: Scientific research is generally judged by publications. Such publications fall into various hierarchical categories of importance. It is customary in the field of

the natural sciences and to quite some extent in the social sciences to consider publications in refereed journals as very important in personnel evaluation because they are subject to peer evaluation. Also important are scientific books published by the applicant alone or together with other scientists. It would depend on particular circumstances whether individual chapters in scientific works or works of joint authorship ought to be considered more weighty. Next in importance, as generally considered for evaluation in the sciences are invited and non-refereed papers, such as result from contributions to symposia, including the editing of them, etc. In the above categories some weight is obviously to be given to the international, national or regional nature of the publication or publisher. It is possible that efforts of Pacific relevance are to be appreciated appropriately as far as Hawaiian scientists are concerned.

Next in the hierarchy of publications are off-print or mimeographed writings and the like which have a far more limited distribution than the printed ones.

Papers in press (or accepted) may be submitted in mimeograph form but applicants are advised not to submit papers in preparation under the category of accomplishments. The reason for this is that the review process may lead to non-publication, delay through alteration, or request for additional work, etc.

Such endeavors may, however, be included under prospects; they will be judged by the committee (see below) with the proper perspective. Also

under prospects should be described evidence of active ongoing research. It is considered appropriate that the applicant list and characterize whatever extramural grants he has been able to procure to permit him to carry on the research direction he has chosen, and to mention realistic, not pie in the sky, prospects of the development of continuation of such research.

It should be emphasized that the correlation between quality of research and quantity of publication is by no means a perfect one. Some research efforts, by nature require considerable lead time before they produce publications. In such instances, other criteria for research progress must be sought (e.g., peer review of research programs). Moreover, the organization and editing of the results from symposia (see above) or from cooperative research efforts may be important research progress not directly measured by personal publication. Again, it is necessary to recognize such effort.

Education and training: At the Hawaii Institute of Marine Biology a number of researchers carry joint appointments with departments on the UH-Manoa campus. The UH-Manoa portion of their appointment stipulates formal teaching. For persons with such appointments, the evaluation of teaching will be done by the respective UH-Manoa departments including student evaluation reviews. Inasmuch as research and training, and education are inseparable, members of the Hawaii Institute of Marine Biology with full research appointments be this on state, grant, or

contract funds, are also expected to teach. Most of their teaching will be on-the-job-training of graduate students and, to some extent, undergraduate and more or less long-term employed student assistants. They are also expected to supervise technicians who are expected to increase in competence and value to respective programs of the state and other scientific missions of the station by such supervision. The applicant is requested to detail his activities in this regard. It is important that chairmanship of graduate student committees or (membership on the committee) of graduate students for their formal degrees, be mentioned. It is also important that the applicant mention if and when, as he might well do, engagesin some formal teaching of his choice. This may take the guise of teaching advanced courses or seminars. Such endeavors will be properly weighted in the evaluation and supporting evidence ought to be supplied.

Public service: Public service can fall into a fair number of categories most important of which are the following: being engaged in service within the university community, e.g., campus committees; being engaged in editorial and related work for international, national and regional, and professional organizations; serving national agencies, e.g., NSF committees, NAS panels, etc.; participating in the writing and/or review of environmental impact statements; giving testimony or otherwise interacting with legislative and/or executive branches of the government of Hawaii or the City; leadership of and participation in

the civic sphere with local citizens and special interest groups, whose aims and purposes are however related to the applicant's professional field. (For instance, jury duty or playing in the symphony orchestra or singing in a glee club, is not while addressing and/or advising the Outdoor Circle, or some such organization, in or out of regular work hours can be public service for the purpose of promotion.

Since the evaluation of technical competence and public service relies on peer judgements and deals with a variety of activities, it must remain somewhat subjective. The above guidelines while they cannot be exhaustive have been set down to reduce this subjectivity as much as possible. How the three categories should be weighted in detail will vary in each case; as a rough approximation, however, one would expect that not more than about one-fourth of the applicant's full or half time effort at HIMB would be apportioned by him to public service as it is here defined. If an applicant has some defined administrative duties at HIMB, e.g., one-fourth or one-half time, such appointment, the weighting of research, education and service would be determined by the committee for each case. Narratives on the application forms should refer to supportive materials to enable their easy and most effective perusal.

Process of Evaluation:

Inasmuch as in the field of marine biology is composed of a substantial number of disciplines and inasmuch as the activities at the

Hawaii Institute of Marine Biology are both of a basic and applied nature, it is important that the peer group called upon to evaluate applications for promotion represent both competence to exercise a general overview and can also judge adequately specific areas of specialization. Inasmuch as the scientific personnel roster on University payroll at the Institute is now relatively small, two full time and six half time appointments, the method of evaluation will be as follows. The committee to advise on promotion will consist of a core group and of co-opted scientists who perform their duties on an ad hoc basis. In other words, the core group will stay the same but the co-opted personnel may and is very likely to vary from case to case. The core group is to consist of the director of the Institute, the associate director, and one of the scientific staff members with locus of tenure at the Institute. For the next two years, this staff member is Dr. Jed Hirota whose joint appointment is in the Department of Oceanography. This institute staff member will either be reappointed or another appointed in his stead for a similar period of time. The co-opted committee members are to be two additional scientists who may be chosen from the ranks of BOR appointees at the Institute or at any Manoa Campus department. Their names will be determined through concensus of the core group. For example, if the applicant for tenure would be a specialist in the ecological physiology of marine organisms, a member of the Department of Physiology in the Medical School and/or of the Department of

Chemistry may be co-opted. If he is an aquaculturist, the ad hoc promotion committee members may for instance be taken from agricultural engineering or economics departments. It is expected that fair, in depth, and highly competent judgements will be rendered in this manner.

3 December 1976

HIMB DPC REVIEW OF THE BALAZS APPLICATION FOR PROMOTION

I. Evaluation of Teaching

Since Mr. Balazs is employed at HIMB primarily to carry out research, no formalized teaching of courses was either expected or carried out. However, a few course lectures were given in the Departments of Zoology and Animal Sciences, which are to his credit.

II. Evaluation of Research

A. Publications: Mr. Balazs has made some important contributions to the knowledge of Chelonia behavior and migrations in the Hawaiian Archipelago as publications in respectable journals. He has also carried out good quality aquaculture research on the growth and survival of Macrobrachium under semi-controlled conditions. His work on presenting problems facing sea turtle conservation and surveys of potential nesting grounds are also important for public interest in conservation. I think that George has presented a very good balance between basic research on prawns and turtles on the one hand and has tried to popularize the need for management and conservation on the other.

B. Contracts and Grants: The most recent support from MAC (p. 4.2) for green sea turtle research shows that George has greatly improved his ability to obtain funds for projects which interest him and the State of Hawaii.

III. Service

George has served as reviewer of manuscripts and a proposal, which shows confidence in him as a scientist. He has also been very active in providing information to the public and to various State and Federal agencies, which clearly benefits HIMB visibility with regard to this aspect of its functional role in Hawaii. He supervised various University of Hawaii undergraduates (MOP) and interested high school students.

IV. Other

George has indicated positive efforts toward professional improvement and extension of his background beyond the confines of the State of Hawaii.

In summary, I support Mr. Balazs with a strong recommendation for his requested promotion.

Jed Hirota

Jed Hirota, HIMB
DPC Chairman

University of Hawaii at Manoa

Hawaii Institute of Marine Biology
P.O.Box 1346 • Coconut Island • Kaneohe, Hawaii 96744
Cable Address: UNIHAW

December 4, 1976

TO : HIMB Promotions Committee

FROM : Ernst S. Reese, Professor of Zoology

SUBJECT : Promotion of Mr. George H. Balazs

It is my opinion that George Balazs has done an outstanding job in the relatively short time he has been with us as a research marine biologist. I recommend him for promotion in the highest manner and with no reservations whatsoever. My reasons follow.

1. In the area of research, he has defined and successfully carried out research in an important area, marine turtle biology, aquaculture and conservation. He has published significant articles on the subject in respected and refereed journals. He has been extremely active in the difficult area of trying to promote conservation measures for these endangered animals, and, I believe, he has been effective in creating public awareness for the problem.

I am impressed at how enterprising Balazs is at seeking funds for his research through whatever avenues are open to him. I like his dedication and willingness to work hard.

2. In the area of education and training, he has always been helpful with students and has taken advantage of speaking engagements as they arise. For example, at the present time George has been helpful to me in trying to make arrangements for a graduate student, David Clugston, to work on the Hawaiian monk seal in the leeward islands.

3. In the area of community service, he has made a major contribution through his conservation efforts on behalf of marine turtles. Besides public speaking, he has testified at public hearings on the subject.

Overall, I believe that Balazs' publication record, his participation in various conferences and meetings, his on-going research on turtles, and his service to the community atest to his performance as a productive scientist. I believe his efforts have brought credit and favorable publicity to HIMB. I believe he is a valuable member of our staff.

University of Hawaii at Manoa

College of Tropical Agriculture
Department of Animal Sciences
Henke Hall 106 • ~~1833 Edmondson Road~~
Honolulu, Hawaii 96822

December 2, 1976

MEMO TO: Phyllis Luminelli
Administrative Officer
Hawaii Institute of Marine Biology

FROM: Ernest Ross
Poultry Scientist

SUBJECT: Application of George H. Balazs for Promotion

I recommend that the applicant be promoted from Jr. Marine Biologist (R-2) to Asst. Marine Biologist (R-3) for the following reasons:

1. The research record of the applicant is outstanding, demonstrating a degree of maturity far beyond that normally encountered in a Jr. Researcher. The applicant has a very respectable publication list which includes 13 publications of which he is senior or sole author. More than half of these are in respectable refereed journals. While I share authorship with Balazs on a number of papers, he did most of the writing and deserves much of the credit for their general excellence. It is a significant achievement, indeed, when the editor of an international journal is impressed enough with a publication to write the author praising his work, as did the editor of Aquaculture (see p 4.8).

   The important thing to realize is that this is not the work of an associate or full researcher being evaluated here, but that of a Jr. Researcher whose duties do not normally include the conduct of original research and the writing of research papers!!

2. Although not included in my copy of Balazs' promotion application, I know from personal experience that he has supervised the activities of high school students working at Coconut Island, supervised the activities of a number of Marine Option students, as well as supervised student help over a long period of time. In addition, he has assisted a number of graduate students with their projects.

   I think that it is typical of this applicant that he has carried out these often unrecognized duties with enthusiasm and skill, often forming relationships with his students that would be the envy of many more experienced teachers. His ability to relate to the students and stimulate their interest is apparent in their respect for him.

3. The applicant's record of community service is as impressive as his research and teaching. His willingness to give of his time to lecture to groups on as well as off campus is indicative of a dedicated scientist. In addition, his conservation efforts on behalf of the Hawaiian green sea turtle have been outstanding and have earned him the recognition of an outstanding international conservation organization as well as the respect of legislators and local conservation and environmental groups.

   The initiative, enthusiasm and eloquence of this applicant in serving his community reflects favorably on his unit and the University.

Note: The minimum qualifications for Assistant Researcher requires: "Training equivalent to that represented by one year of graduate work beyond the master's degree . . . in courses supporting that field or branch of learning indicated by the title of the class." Although the applicant has not taken any formal graduate courses beyond the master's degree, it is obvious that he qualifies in "training equivalent" as follows:

   a. The applicant's M.S. degree was in Animal Science, yet he has very capably carried out research in marine biology.

   b. The applicant's interest and studies of marine turtles have made him one of the country's few experts in this area which has lead to an invitation to meet with the world's turtle experts. The expertise thus obtained would certainly qualify the applicant in "training equivalent" to a year of graduate study beyond the master's.

UNIVERSITY OF HAWAII

Hawaii Institute of Marine Biology

MEMORANDUM

November 23, 1976

To: P. Luminelli, Administrative Officer

From: S. V. Smith, Associate Director

Evaluation of promotion application by George H. Balazs.

Three categories of evaluation criteria have been set up for evaluation of HIMB Professional Technical Personnel.

1. Research - Balazs has done very well in this category. His publication rate has been very acceptable; a substantial proportion of his publications have been in first-line journals for his field of endeavour; and one of his publications was sufficiently meritorious to win him an unsolicited, highly positive note from the journal editor.

For someone in a very junior position, Balazs' success at bringing in grant money has been another measure of scientific ability. The dollar amount has not been large, but it has increased--and, in fact, is a bonus from someone at his level.

2. Education/training - Balazs has not had a direct teaching responsibility. Nevertheless, he has lectured at various levels and as such has carried conservation philosophies to those levels. In a sense, this is a public service. Its educational importance is, again, performance well above and beyond the call of duty.

3. Service - It is perhaps mostly in this capacity that Balazs shines. He has had a remarkable record of public testimony before State and Federal agencies. He has served on one major and internationally recognized committee. He is a reviewer (and, by the editor's statement, a valued one) for the journal Aquaculture, which is a major one in his professional field. And he has several lesser accomplishments.

Based on the HIMB criteria for promotion, Balazs' present rank, and his present vigor, I heartily endorse his request for promotion.

December 6, 1976

To: George Balazs

From: Phyllis Luminelli

Your application for promotion is presently being reviewed by the following individuals: J. Bardach, HIMB, S. Smith, Assoc. Dir., HIMB, J. Hirota, Chairman of HIMB Personnel Committee, E. Reese, Prof. of Zoology, and E. Ross, Poultry Scientist.

The recommendation of this committee will be forwarded to ORA with copies of your dossier in time for the December 13th deadline.

If you have any questions regarding your application or the processing thereof feel free to contact me.

PL:md

PROMOTION APPLICATION

Name of Applicant George H. Balazs

PART VI. DEPARTMENT CHAIRPERSON'S RECOMMENDATION (To be completed by Department Chairperson, Research Unit or Other Unit Head)

A. Assessment of applicant

1. In addition to the material available to the DPC, I have solicited or received the following material which is appended (identify, with due regard to confidentiality):

2. I am appending statements on my:

a. assessment of the applicant's accomplishments in teaching (page(s) 6.2 to to 6.3) [X]

b. assessment of the applicant's accomplishments in research (page(s) 6.2 to 6.3) [X]

c. evaluation of the applicant's accomplishments in community service (page(s) 6.2 to 6.3) [X]

d. evaluation of applicant's other appropriate activities (for faculty not engaged in instruction) (page(s) 6.2 to 6.3) [X]

B. Recommendation

I am aware that the criteria for promotion shall relate to the candidate's accomplishments in teaching, research and community service if he is in an instructional category, or other appropriate activities for faculty not engaged in instruction.

I recommend that (check one):

promotion be granted [X]

promotion not be granted [ ]

Signed R. Summerville for J.E. Bardach
Department or Unit Head Chairperson

Name John E. Bardach

Department/Unit Hawaii Institute of Marine Biology

Date 12/9/76

University of Hawaii at Manoa

Hawaii Institute of Marine Biology
P.O.Box 1346 • Coconut Island • Kaneohe, Hawaii 96744
Cable Address: UNIHAW

November 23, 1976

SUPPORTING STATEMENT FOR THE PROMOTION OF MR. GEORGE H. BALAZS

John E. Bardach, Director
Hawaii Institute of Marine Biology

The material submitted by Mr. Balazs really speaks for itself - so much so that adding any comments seems almost like guilding the lily. Still, it is rare that one can say of a man that he has performed service truly beyond the call of duty and achieved accomplishments far beyond those expected from normal performance of duties. Mr. Balazs represents such a case.

By classification a junior biologist without a Ph.D. degree, he has done work that would do credit to many, if not most, post-doctoral workers in his field. Let me deal with research accomplishments first.

Balazs has shown himself to be highly versatile, meticulous and inventive. These qualities are amply corroborated by his scientific writings. My comments will deal separately with animal nutrition and his work on green turtles. Being a member of the editorial board of the journal Aquaculture in which Balazs published (with Dr. Ross of the Animal Science Department as second author), one of his nutrition papers, I can only reinforce the comments of the executive editor (Dr. Don Alderdice of the Nanaimo Biological Station in British Columbia), that the Balazs-Ross paper is an outstanding example of good scientific work and an eminently able presentation. To have an executive editor of a refereed journal say that he has seen few papers which show the care and attention given the design, conduct and analysis of experiments, and few that have the resultant quality of presentation of this paper, is indeed a compliment and a well deserved one. Add to this that the paper deals with the nutrition of an animal of extreme importance to the State of Hawaii in its

aquaculture endeavors, namely the Malaysian prawn, enough is said about Balazs' outstanding research performance. I shall not dwell on the quality of the other papers. Let it suffice that most of them were published in refereed journals and that is quality control enough.

His research on Hawaiian green turtles is yet another story and a rather remarkable one at that. From his research with turtle nutrition he developed a consuming interest in the natural history of this threatened species which is certainly important to Hawaii and the Pacific Islands. He has become one of the acknowledged experts in the natural history of marine turtles and has gained international reputation through his work. His work on turtle nutrition as well as his work on turtle biology is outstanding and is recognized as such by the World Wildlife Fund and the International Union for the Conservation of Nature, as well as by the Smithsonian Institution - all "reasonably" prestigious entities.

It is fortunate but also significant for his present quest for promotion that this scientific interests deal by and large with subjects of interest and importance to Hawaii. He certainly satisfies this particular condition for promotion by the outstanding nature of this work.

And now to his public service. As the many attached letters testify commending him for participation in unremunerated talks to civic groups, Balazs is a very public service-minded citizen. One particular additional instance of public service that I wish to bring to the reviewers' attention is the publication of Hawaii's Seabirds, Turtles and Seals, an outstandingly, well illustrated guide to this part of the biota of the Leeward Islands. It is to be noted that these islands will soon become a more integral part of the State of Hawaii than they now are, for in March 1977 Hawaii's sea space will be enlarged by being incorporated in the U. S. Extended Economic Zone. Thus public and state service coincide here.

All in all, I wish to stress as forcefully as I can that I recommend Mr. Balazs for the promotion he seeks emphatically and without reservations.

mk

PROMOTION APPLICATION Name of Applicant George H. Balazs

PART VII. ~~COLLEGE/SCHOOL~~/ORA PERSONNEL COMMITTEE (CPC) (To be completed by CPC Chairperson)

A. Committee structure

Please forward under separate cover (one copy per college) a statement of how the CPC was chosen, the names, positions and titles of the membership, and details of the procedures used by the CPC.

B. CPC had the following additional materials available (please list with due regard to confidentiality):

The ORA Personnel Committee voted unanimously in favor of the promotion of Mr. George Balazs from R2-8 to R3-3. The committee noted that, in line with HIMB criteria for promotion, Mr. Balazs has shown, over the last several years, that he can do, and actually has done, R-3 level work. This includes independent research and publication primarily in the field of sea turtle behavior and conservation, and considerable lecturing and public testimony in this field. The committee was particularly impressed by the letters (4.8) from Dr. Alderdice, editor of the journal Aquaculture, praising the Balazs and Ross manuscript.

C. CPC has considered the application and the assessments and recommendations of DPC and DC. A statement summarizing CPC's review of the application and prior recommendations is appended (page(s) 7.2 to 7.____). ☐

D. Recommendation

The CPC's recommendation is as follows (give number of votes in each category):

5 members voted to recommend promotion

0 members voted to recommend against promotion

0 members abstained from voting

E. Certification

I hereby certify that CPC has considered the applicant's accomplishments in ~~*(a) teaching, research, and community service as he/she is in the instructional category, or~~ *(b) other appropriate activities as he/she is not engaged in instruction category, and that the vote recorded above is correct.

Signed Philip Helfrich
CPC or Unit PC Chairperson

Name Philip Helfrich

~~College/School~~/ORA ORA PERSONNEL COMMITTEE

Date January 12, 1977

*Strike whichever is inappropriate.

ORA PERSONNEL COMMITTEE, 1976

The University Research Council selected five faculty members in 1975 all of whom were at rank 5 (I5, R5) and associated with the Organized Research Units. The current committee consists of three carryovers---Drs. Batkin, Harms and Sinton. Dr. Forrest Pitts has resigned and was replaced by Dr. Glenn Paige, Professor of Political Science. Dr. Paige was unable to participate in the current deliberations and was replaced by Dr. Deane Neubauer, also Professor of Political Science. Dr. A. S. Furumoto was replaced by Dr. Keith Chave of HIG. These decisions on replacements were made by Dean Philip Helfrich in consultation with Acting Dean Kay.

The Committee as presently constituted therefore consists of the following:

Name	Position	Title	Research Affiliation
Dr. Stanley Batkin	I5	Professor of Surgery	PBRC
Dr. Keith E. Chave	I5	Professor of Oceanography	HIG
Dr. L. S. Harms	I5	Professor of Communication	SSLI
Dr. Deane Neubauer	I4	Assoc Prof of Political Sci	—
Dr. William Sinton	I5	Professor of Physics & Astron	IFA

Dr. Philip Helfrich (M8) will serve as the non-voting Chairman of the Committee.

The ORA Personnel Committee functions in an analogous way as the CPC for reviewing promotion and tenure applications of BOR appointees in the following categories:

(1) organized research units that report to the Director of Research (HIG, HIMB, IFA, PBRC, SSLI, WRRC, PGL, Environmental Center, and Lyon Arboretum); personnel may be either on state or extramural funds or any combination of both and may be either full-time in the organized research unit or on joint appointment with other academic or research units.

(2) contract appointees on extramural funds, monitored through ORA, and working for a principal investigator/program director who may be either in an academic unit or research unit.

For category (1), the applicants are notified through the chairmen or directors to submit their dossiers for promotion and/or tenure in accordance with the current UHM procedure. Supervisors of personnel in category (2), i.e., principal investigators or program directors, are notified by the Associate Dean, Research and Training, to obtain and submit applications for promotion.

The dossiers are reviewed by all members of the Committee prior to general discussion and vote on each candidate.

The Committee was guided in its deliberations by the criteria that accompanied the applications as well as those delineated in the Faculty Handbook for the various ranks. The Committee is concerned mainly with the research activities of the applicants in its review of the dossiers.

PROMOTION APPLICATION

Name of Applicant George H. Balazs

PART VIII. DEAN'S RECOMMENDATION

A. Assessment of applicant

1. In addition to the material available to prior reviewing bodies I have solicited or received the following material which is appended (identify, with due regard to confidentiality): None

2. I have considered the application and the assessments and recommendations of DPC, DC, and CPC. A statement summarizing my review of the application and prior recommendations is attached (page(s) 8.2 to 8. 2). [x]

B. Recommendation

I am aware that the criteria for promotion shall relate to the candidate's accomplishments in teaching, research, and community service if he is in an instructional category, or other appropriate activities for faculty not engaged in instruction.

I recommend that (check one):

promotion be granted [x]

promotion not be granted [ ]

Signed E. Alison Kay
Dean

Name E. Alison Kay, Acting Dean and Director of Research

College/School Graduate Division & ORA

Date January 31, 1977

PROMOTION APPLICATION Name of Applicant George H. Balazs

PART VIII. DEAN'S RECOMMENDATION

A.2 Mr. Balazs fully meets all criteria for promotion to R-3. He has demonstrated both ingenuity and independence in his research work, and developed well-deserved international and national recognition for his work with the green turtle in Hawaii. His publication record in both scientific and other journals is indicative of the broad scope of his interests and talents--nutrition, energetics, behavior, and management of marine resources. I concur with the recommendations of the departmental personnel committee, department chairman, and ORA personnel committee that he be promoted.

PROMOTION APPLICATION Name of Applicant George H. Balazs

PART X. MANOA CAMPUS FACULTY PERSONNEL COMMITTEE (MCFPC) (To be completed by MCFPC Chairperson

The purpose of the Manoa Campus Faculty Personnel Committee is to ascertain that proper procedures are followed, and that pertinent information has been considered in assessing each faculty member who applies for promotion.

A. ARTICLE VI. Materials received and acknowledged (choose one and check):

1. ☐ MCFPC has received written comments and additional materials from the applicant via the Chancellor. We have considered and incorporated them in the dossier immediately following this page; MCFPC's recommendation takes cognizance of these additional materials.

2. ☑ MCFPC has not received any written comments or additional materials from the applicant.

B. Certification on procedures (choose one and check):

1. ☑ I certify that the members of MCFPC have ascertained that proper procedures have been followed and that pertinent information has been considered in assessing the applicant for tenure.

2. ☐ I certify that the members of MCFPC have identified a deficiency in that proper procedures were not followed/pertinent information was not considered (strike as appropriate) for assessing the applicant for promotion. I returned the dossier to _____ on ____/____/____ for reconsideration.

(a) The deficiency was corrected on ____/____/____/

(b) The deficiency remains as of ____/____/____.

C. Evaluation of applicant

MCFPC has considered the application and the assessments and recommendations of DPC, DC, CPC and Dean, and (if applicable) the additional comments and materials received from the applicant. A statement summarizing MCFPC's review of the application and prior recommendations is appended (page(s) 10.2 to 10.____). ☐

D. Recommendation

MCFPC's recommendation is as follows (give number of votes in each category):

20 members voted to recommend promotion

0 members voted to recommend against promotion

0 members abstained from voting

E. Certification on evaluation

I hereby certify that the MCFPC has considered the applicant's accomplishments in *(a) teaching, research, and community service as he/she is in the instructional category, or *(b) other appropriate activities as he/she is not engaged in instruction category, and that the vote recorded above is correct.

Signed Kunio Nagoshi Chairperson, MCFPC

Name Kunio Nagoshi

Date 3/25/77

*Strike whichever is inappropriate.

MCFPC Form 3

MCFPC REPORT TO THE CHANCELLOR

Date: March 24, 1977

George H. Balazs — Name of Applicant

OR/HIMB/1 — Dossier Number

Tenure [ ]

Promotion [X]

The MCFPC finds that there is sufficient pertinent information in the dossier to support the previous positive recommendations, based on departmental and University criteria.

Francis Gregorka

MCFPC Chairperson

Special Note:

PROMOTION APPLICATION

Name of Applicant George H. Balazs

Chancellor

I am aware that the criteria for promotion shall relate to the candidate's accomplishments in teaching, research and community service if he is in an instructional category, or other appropriate activities for faculty not engaged in instruction.

I recommend that (check one):

promotion be granted ☐

promotion not be granted ☑

Signed _____
Chancellor or Designee

Name G. C. Ashton

Date 4/11/77

Mr. Balazs fails to meet the minimum criterion of training represented by one year of graduate work beyond the master's degree.

From: Sir Peter Scott CBE DSC

THE NEW GROUNDS
SLIMBRIDGE
GLOUCESTER GL2 7BT

Tele: Cambridge (045-389) 333
Cables: Wildfowl Dursley

6th August 1977

Dear Mr Balazs

International Union for Conservation of Nature & Natural Resources

Survival Service Commission

I am writing to ask if you will be willing to serve the Survival Service Commission of IUCN as a member of the Marine Turtle Specialist Group under the Joint-Chairmanship of Professor Archie Carr, Caribbean Conservation Corporation, Department of Zoology, College of Arts and Sciences, University of Florida, Gainesville, Florida 32601, U.S.A., and Dr Nicholas Mrosovsky, Department of Zoology, University of Toronto, Toronto, Ontario M5S 1A1, Canada, for the 1976/78 triennium.

In common with all Specialist Groups of the Survival Service Commission, group members are asked to advise the Commission, through their Group Chairman, on conservation matters relating to their field of competence and to gather information for the Red Data Books. Most of the work of the Group members will be carried out by correspondence, although it may be necessary to arrange a meeting from time to time.

The Action Programme of the Survival Service Commission is built up on the advice of the Specialist Groups so your role within the Commission's organisation is absolutely vital for the success of IUCN's total conservation programme.

I do hope, therefore, that you will feel able to accept this invitation to work with the Commission.

Yours sincerely

Peter Scott.

Chairman
Survival Service Commission

UNIVERSITY OF FLORIDA
GAINESVILLE, 32611

DEPARTMENT OF ZOOLOGY
223 BARTRAM HALL
904-392-1107

February 28, 1979

Dr. George Balazs
University of Hawaii at Manoa
P.O. Box 1346
Coconut Island
Kaneohe, HI 96744

Dear George:

Many thanks for your letter of February 7, with the six constructive suggestions for putting life into the Turtle Group. I am in complete agreement with all your ideas, except possibly the first (one kind of membership). In that case I simply can't think through the advantages and disadvantages of the alternatives.

Your fifth point stirs me most deeply, because there may be a chance of realizing your aim to get turtle data for the South China Sea. I'll be very glad to make the inquiry, but am not having much success getting the name of the appropriate individual to write to. If you should know this please advise.

We can, as you say, talk about these and other matters in San Jose. Meanwhile, congratulations on your now formalized appointment as Deputy Chairman.

Best regards.

Sincerely yours,

Archie Carr
Graduate Research Professor

AC:ljw

NATIONAL SCIENCE FOUNDATION

PROPOSAL EVALUATION FORM

NSF Form 1B (10-79)

PROPOSAL NO.	INSTITUTION	PLEASE RETURN BY
DAR-8016290	UNIVERSITY OF ARIZONA	

PRINCIPAL INVESTIGATOR	NSF PROGRAM
HENDRICKSON JOHN R	APP PHYS, MATH & BIO & EN

TITLE

"LIVING TAGS" FOR SEA TURTLES

COMMENTS (CONTINUE ON ADDITIONAL SHEET(S) AS NECESSARY) (page one of two pages)

I have serious reservations that the proposed autotransplantations on hatchlings can be accomplished in a manner that will result in *proportionate* growth of light-colored areas clearly discernible during later life stages, particularly adulthood. The same failures of mutilation marking, that is, variable healing, regeneration, repigmentation and confusion with natural injuries, seem destined to obscure this proposed marking technique. The idea is indeed novel, but is it likely to be surgically possible, practical in application, reliably identifiable, and not result in increased predation or reduced survival? In my opinion, favorable answers cannot reasonably be expected for most, if not all, of these fundamental questions. Apparently the author has not undertaken pilot studies with sea turtles, or any other marine reptiles, to first determine if such skin or scute transplants can be accomplished for even short periods of time. This would seem to be a minimum prerequisite for submitting the proposal.

The problem of finding a suitable tag for hatchling sea turtles has been discussed at length for many years and subjected to varying levels of experimentation. What has *not* been adequately considered is the actual *utility* of the tag, should the "ideal" marking system ever be successfully developed. The survival rates for different age classes in sea turtle populations are unknown, however Hirth and Schaffer (*Copeia*, 2, 1974) present a mathematical model indicating that no less than 2.2, and possibly as many as 10, hatchlings per 1,000 must survive to reproductive maturity to maintain a stable green turtle (*Chelonia mydas*) population. Extremely large numbers would therefore have to be marked with the ideal tag if any reasonable chance for future recovery is expected. Some hatchery projects now in existence could possibly supply these numbers through their practice of removing eggs from the wild, hatching them in captivity (often in styrofoam boxes), and subsequently releasing the hatchlings into the wild. However, at all other breeding areas where *natural* hatching and nest emergence take place it would be impractical, if not impossible, to collect hatchlings in sufficient numbers. The emergence of hatchlings takes place almost exclusively at night from underground nests, the locations of which are obscured by weathering and other turtles that continue to nest during the two month incubation period. Furthermore, natural emergence and movement into the sea occur very rapidly, with little opportunity for human detection. Hatchlings could of course be obtained by converting these natural breeding sites into costly hatchery projects, but this is not an accepted conservation practice unless predation on eggs and/or hatchlings is excessive and cannot be controlled (Hirth, FAO Synopsis of Biological Data on the Green Turtle, 1971).

RATING: ☐ EXCELLENT ☐ VERY GOOD ☐ GOOD ☒ FAIR ☐ POOR

REVIEWER'S SIGNATURE	REVIEWER'S NAME (TYPED)
Daryl A. Bale	

OTHER SUGGESTED REVIEWERS (OPTIONAL)

REVIEWER'S COPY

Comments are presented on the following additional points of the proposal.

1. Page 2: It seems more likely that the absence of an understanding of many aspects of sea turtle life history is due to the fact that nearly all research to date has been focused on adult females at terrestrial nesting beaches. This is obviously a very small segment of the life history. Work needs to be carried out on subadult turtles in their inshore foraging pastures (see Limpus, Balazs, *Marine Turtle Newsletter*, January 1979). Tag and recapture studies at these locations are entirely feasible using existing metal or plastic tags inscribed with return addresses and individual ID numbers.

2. Page 3: The stated reference of Benedict and Pollard (1972) contains no mention of research on an immunological "living tag" for sea turtles.

3. Page 4: The statement in the first paragraph is by no means applicable to all tagging programs. The author should consult Carr *et al.* (Ecology and Migrations of Sea Turtles, *Bulletin of the American Museum of Natural History*, 162, 1978).

4. Page 4: The contrasting dorsal and ventral coloration of *Chelonia* hatchlings is believed to have adaptive significance which includes reduced predation from fish and sea birds (Bustard, *Herpetologica*, 26, 1970). Altering this coloration by autografts may therefore result in increased mortality, both for the newly incised hatchlings and subsequent age classes.

5. Page 9: It would clearly be unwise to field mark any hatchlings of a Threatened or Endangered species by these experimental surgical procedures *before* evaluating the results in laboratory trials over a reasonable time period (1-2 years, see page 1, lines 21-22).

6. Page 11: All of the proposed activities for work with sea turtles in the United States would require permits issued under the U. S. Endangered Species Act. Public scrutiny would occur through comment periods published in the *Federal Register*.

WAIKIKI AQUARIUM

November 14, 1978

Ms. Leatrice Higa
Dillingham Corporation
P. O. Box 3468
Honolulu, HI 96801

Dear Ms. Higa:

This letter will confirm our telephone conversation of November 8, during which you approved my request to duplicate George Balazs' slide of a fairy tern in order to produce a large color blow-up to be presented to a representative of the state government at our bookstore reception on November 17.

It was also my understanding that you would prefer that enlargements of Mr. Balazs' other slides, which are also used in the 1979 Dillingham calendar, not be hung prior to the release date. Although I am happy to abide by this, it is my understanding that although the calendar is copyrighted, exclusive use of the photographs was not granted to Dillingham. If this is not the case, I would appreciate your advising me otherwise.

It was also my understanding that the Waikiki Aquarium has permission from Dillingham to indicate at our November 17, reception that the picture to be presented by Mr. Balazs to the state official will appear in the 1979 Dillingham calendar. We do appreciate the cooperation you have given us. We feel that Mr. Balazs is indeed a talented photographer and researcher in Hawaii, and his work deserves wide recognition.

Sincerely,

Leighton Taylor

Leighton Taylor, Ph.D.

LT:fc
cc: George Balazs

University of Hawaii • 2777 Kalakaua Avenue • Honolulu, Hawaii 96815 • (808) 923-5335

SEA LIFE PARK

October 9, 1980

George Balazs
Hawaii Institute of Marine Biology
PO Box 1346
Kaneohe, HI 96744

Dear George,

Again, thank you for a wonderful lecture on Sea Turtles. The volunteer docents enjoyed every minute of your presentation...really! Also, thank you for the sea turtle sighting forms--they are all gone! Maybe you can send some of those to me every now and then?

Enclosed is a check for your services. We certainly appreciate your interest in the Sea Life Park marine education program and look forward to hearing you speak during our Spring Volunteer Docent Workshop.

Mahalo and Aloha,
SEA LIFE, INCORPORATED

Marilyn C. Lee
Education Coordinator

Enclosures

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 948-7361

Office of the Director

October 27, 1980

Mr. George Balazs
c/o National Marine Fisheries Service
P.O. Box 3830
Honolulu, Hawaii 96812

Dear Mr. Balazs:

On behalf of the U.S. Fish and Wildlife Service, the U.H. Environmental Center, and the U.H. Sea Grant College Marine Advisory Program, we thank you for your participation in the Pacific Island Ecosystems Workshop. We feel that the workshop achieved the goal of providing an overview of selected island ecosystems and major management concerns. Your contribution toward meeting this goal was significant. We very much appreciate your contribution of time and expertise and look forward to your participation in future workshops that focus upon island ecosystems.

Aloha,

John Byrne
Coastal Ecosystems Project, U.S. Fish & Wildlife Service

Doak Cox
Environmental Center, University of Hawaii

Ray Tabata / Bill Thomas / Peter Rappa
Marine Advisory Program, University of Hawaii

OFFICE OF THE LIEUTENANT GOVERNOR
STATE CAPITOL
HONOLULU, HAWAII 96813

JEAN KING
LIEUTENANT GOVERNOR

(808) 548-2544

December 4, 1980

Dr. George H. Balazs
National Marine Fisheries Service
Southwest Fisheries Center
Honolulu Laboratory
P.O. Box 3830
Honolulu, Hawaii 96812

Dear George:

Thank you so very much for sending me your SYNOPSIS OF BIOLOGICAL DATA ON THE GREEN TURTLE IN THE HAWAIIAN ISLANDS. One of the very impressive things in it is the listing under Balazs beginning with number 44 and running through 91! It's a valuable document and even at a quick glance I can see how much work has gone into it.

Thank you too for the 1981 Dillingham tide calendar. The photographs, as were your photographs in the 1980 calendar, are a joy and stretch our horizons. You keep contributing over and over to the community. Thank you so much.

I hope the holidays are sparkling and satsifying ones for you and Linda.

With all good wishes,

Jean

JEAN KING
Lieutenant Governor

JK:nbl

University of Hawaii at Manoa

A Sea Grant College
Spalding Hall 252 B • 2540 Maile Way
Telephone (808) 948-8191 • Honolulu, Hawaii 96822 / Cable Address: UNIHAW

Marine Advisory Program

December 29, 1980

George Balazs
Hawaii Institute of Marine Biology
Coconut Island
Kaneohe, Hawaii 96744

Dear George,

On behalf of the sponsors of the Spring 1981 Marine Lecture Series -- the Waikiki Aquarium, UH Sea Grant/Marine Advisory Program, and Society of Sigma Xi -- mahalo nui loa for agreeing to be one of the speakers. Your kokua is greatly appreciated in educational efforts such as the marine lecture series which aim to increase public awareness and understanding of Hawaii's ocean and how it touches all our lives.

This Spring, we are offering more diverse subjects ranging from natural sciences and ecology to meteorology and navigation. The topics were selected after careful consideration of the varying interests of lay audiences. Enclosed for your information are several copies of the flyer for the series. Should you need more copies, please let us know.

From our past experience with the lecture series, we suggest the liberal use of audio-visuals, such as color slides, to illustrate your talk. Well-illustrated talks appear to be much better received than "straight lectures." Graphics such as charts and graphs should be kept to a minimum and carefully chosen for readability from a distance (white image on a color background is best). Also, special care should be taken to avoid technical language and jargon; when it is necessary, a brief explanation would help. Last year, the marine lectures attracted an average of 200 persons per lecture. This Spring, we expect at least the same. So, when planning your talk, please consider the size of the audience as well as the broad range of interests and levels of understanding. Should you need some specific assistance, please feel free to call us.

Finally, as a token of our appreciation, we are offering an honorarium of $25 per lecture. An invoice will be prepared later for your signature to begin the payment process. Should you have any questions or need any assistance, please call me at 948-8191 or Les Matsuura at 923-4725. Again, on behalf of the sponsors, mahalo.

Aloha,

Ray Tabata

xc: Leighton Taylor/Les Matsuura;
Art Reed

University of Hawaii at Manoa

A Sea Grant College
Spalding Hall 252 B • 2540 Maile Way
Telephone (808) 948-8191 • Honolulu, Hawaii 96822 / Cable Address: UNIHAW

Marine Advisory Program

March 17, 1981

Mr. George Balazs
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, HI 96744

Dear George:

Thanks for your excellent presentation " A Journey Through The Northwestern Hawaiian Islands " on March 4, at the Kona Surf Hotel. We have looked through the written evaluations from the audience and they are uniformly positive.

The turnout of 150 people at the lecture indicates great public interest in the little known area of our state nortwest of Kauai, especially with all the talk of its fisheries potential.

We feel that this Big Island Lecture Series, funded by the Marine Affairs Coordinator, is an excellent means of public education about the marine environment which surrounds us and affects us significantly.

Sincerely,

Pete Hendricks

Pete Hendricks
West Hawaii Agent
U.H. Sea Grant Marine Advisory Program
P.O. Box 1327
Kailua-Kona, HI 96740

cc: Alf Pratte

University of Hawaii at Manoa

A Sea Grant College
Spalding Hall 252 B • 2540 Maile Way
Telephone (808) 948-8191 • Honolulu, Hawaii 96822 / Cable Address: UNIHAW

Marine Advisory Program
2349 Kalanianaole Avenue
Hilo, Hawaii 96720
(808) 935-3830

March 17, 1981

Mr. George H. Balazs
Hawaii Institute of Marine Biology
P.O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744

Dear George:

Thank you again for your excellent presentation on the Northwestern Hawaiian Islands. More than 80 persons were present in the audience and their responses were overwhelmingly positive. Everyone found your slide lecture entertaining and very informative. Your presentation brought these usually forgotten islands at the other end of the archipelago much closer to home and reminded many of us of the fragile ecological balance that exists on them.

We have already received a request from a Waiakea High School teacher to have you return to Hilo and present your talk to her classes and the Biology classes at her school. We will phone you the details of dates, travel arrangements, and budget constraints.

Thanks again for sharing your outstanding presentation with the residents of the Big Island.

Sincerely,

Howard A. Takata

Howard A. Takata
East Hawaii Agent

PACIFIC ISLAND ECOSYSTEMS WORKSHOP

ABSTRACT

STATUS OF SEA TURTLES IN THE HAWAIIAN ISLANDS

BALAZS, GEORGE H.

A research program focused on the Hawaiian population of green turtles (*Chelonia mydas*) since 1973 has provided considerable insight on migrations, growth rates, food sources, predation, terrestrial basking, and reproductive ecology. A basic component of this work is the use of corrosion-resistant Inconel 625 alloy tags for the individual identification of adults at the breeding site of French Frigate Shoals and immature turtles captured at foraging pastures throughout the 2450 km long Hawaiian Archipelago.

Both the range and size of the Hawaiian green turtle population have declined within historical times. As in other areas of Polynesia (as well as Micronesia and Melanesia), declines in sea turtles and other easily exploitable marine resources can be attributed to a breakdown in traditional conservation systems brought about by the introduction of cash economies, a decline of traditional authority, and the imposition of new laws and practices by colonial powers.

The hawksbill turtle (*Eretmochelys imbricata*) also occurs in coastal Hawaiian waters, but only in small numbers exclusively around islands at the southeastern end of the Archipelago. The leatherback (*Dermochelys coriacea*) is regularly recorded in offshore areas, but nesting is not known to take place within the Hawaiian chain.

All three species of Hawaiian sea turtles receive legal protection under regulations of the Department of Land and Natural Resources, State of Hawaii, and the U. S. Endangered Species Act. A world conservation strategy recently developed for sea turtles offers potential for restoring populations to their former levels of abundance.

Southwest Fisheries Center Honolulu Laboratory
National Marine Fisheries Service
and
Hawaii Institute of Marine Biology
University of Hawaii

University of Hawaii at Manoa

Hawaii Institute of Marine Biology
P.O.Box 1346 • Coconut Island • Kaneohe, Hawaii 96744
Cable Address: UNIHAW

May 7, 1981

George Balazs
HIMB

Dear George:

You recently hosted two marine resources trainees from the University of the South Pacific, Mr. Steven Halapua from the Kingdom of Tonga, and Mr. Holmes Saeve, native of the Solomon Islands. Their trip to the U. S. mainland and their interaction with you had a tremendous impact on them. As a result of their interactions they were able to tap an enormous reservoir of new knowledge, ideas, approaches to problems of marine science, all of which should be very valuable to them when they return to their home countries. I am most grateful for the time that you devoted to them and wish to thank you for your efforts. If you ever travel in this direction I hope that you will have time to visit our station at Coconut Island.

Best regards and aloha.

Yours sincerely,

Philip Helfrich

Philip Helfrich
Director

PH:md

Pacific Island Ecosystems Workshop

September 29-30, 1980
Ala Moana Americana Hotel
Hibiscus Ballroom I

Sponsored by

US Fish and Wildlife Service
UH Environmental Center
UH Sea Grant College Marine Advisory Program

MESSAGE CENTER . . . . . Phone 955-4811
(Ask for ext. 3473 or "Ecosystems Workshop")

Program

MONDAY, SEPTEMBER 29, 1980

8:00 REGISTRATION

8:30 INTRODUCTION AND WELCOME: J. Davidson, Director, UH Sea Grant College Program

PACIFIC ISLAND ECOSYSTEMS PROJECT
8:40 Project background: J. Byrne, USFWS
National Coastal Ecosystems Team Activities: R. Stewart, USFWS
9:00 Overview of Status Papers: J. Hirota, HIMB
9:30 Pacific Islands Information Resources: B. Bird, UH Hamilton Library
9:45 P.I.E. Data Base Retrieval Demonstration: B. Bird

10:15 MORNING BREAK

10:30 STATUS OF ENDANGERED SPECIES
Moderator: S. Conant, UH General Science
Endangered Flora: D. Herbst, USFWS
Insects and Land Snails: W. Gagne, Bishop Museum
Terrestrial Birds: M. Scott, USFWS
Waterbirds: R. Walker, State DLNR
Marine Turtles: G. Balazs, HIMB/NMFS
Marine Mammals: W. Gilmartin, NMFS

12:00 LUNCH
Luncheon Speaker: D. Coggeshall, Pacific Islands Administrator, USFWS, "Future Fish and Wildlife Service Activities in the Pacific"

1:00 TERRESTRIAL ENVIRONMENTS
Moderator: C. Lamoureux, UH Botany
Island Ecosystems—Some Ecological Characteristics: D. Mueller-Dombois, UH Botany
Historical Changes in the Hawaiian Environment: H. St. John, Bishop Museum
Impact of Feral Animals and Introduced Plants: R. Warshauer and J. Jacobi, USFWS
Avian Diseases: C. Van Riper, Cooperative National Parks Resources Studies Unit, UC/Davis (presented by C. Smith, UH Botany and CNPRSU)

2:45 AFTERNOON BREAK

3:00 REEF ENVIRONMENTS
Moderator: E. Reese, UH Zoology
Reef Resource Inventories: E. Guinther, AECOS
Reef Conditions in the Pacific: J. Maragos, US Army Corps of Engineers
Effects of Siltation and Runoff: P. Bartram, AECOS
Destructive Fishing Methods: D. Brock, HIMB
Sewage Impacts: S. Smith, HIMB
Dredging Technology: J. Ravina, US Army Corps of Engineers
Dredging Impacts: G. Losey, HIMB

5:00 NO-HOST COCKTAILS

TUESDAY, SEPTEMBER 30, 1980

8:30 ISLAND STREAMS
Moderator: D. Cox, UH Environmental Center
General Ecology: R. Kinzie, UH Zoology
Conditions of Pacific Streams: J. Ford, US Army Corps of Engineers
Effects of Habitat Alteration: A. Timbol, Cooperative Fisheries Unit
Water Diversion: L.S. Lau, UH Water Resources Research Center

10:00 MORNING BREAK

10:15 WETLANDS
Moderator: L. Stemmermann, UH Botany
Hydrologic and Nutrient Budget: D. Crear, AECOS
Wetland Vegetation: M. Elliott, UH Geography
Waterbirds and Habitat Conditions in Hawaii: R. Coleman, USFWS
Waterbirds and Habitat Conditions in the Pacific: R. Shallenberger, USFWS

12:00 LUNCH
Luncheon Speaker: A. Ziegler, Bishop Museum, "Prehistoric Birds of Hawaii"

1:00 NATIONAL WETLANDS INVENTORY
History, Status, and Future of NWI: D. Peters, USFWS

1:30 WETLAND CLASSIFICATION SYSTEM
Part I: Introduction to Hierarchy of the System: D. Peters

2:30 AFTERNOON BREAK

3:00 Part II: NWI Mapping Procedures: D. Peters

4:45 CLOSING REMARKS FOR WORKSHOP: J. Byrne

5:00 ADJOURNMENT

Pacific Island Ecosystems Workshop

A B S T R A C T S

September 29-30, 1980
Honolulu, Hawaii

Sponsored by
US Fish and Wildlife Service
UH Environmental Center
UH Sea Grant College Marine Advisory Program

PIE - A NATURAL RESOURCE DATA BASE ON PACIFIC ISLAND ECOSYSTEMS

JOHN E. BYRNE

This paper describes the Pacific Island Ecosystems work and the data base developed by the U.S. Fish and Wildlife Service to aid in research and management activities. The data base is primarily oriented to the inshore and terrestrial natural resource literature of the Pacific Area under U.S. jurisdiction. History of the project and potential applications of the data base are discussed along with a description of its availability.

U.S. Fish and Wildlife Service
500 NE Multnomah Street, Suite 1650
Portland, Oregon 97232
(503) 231-6154

PACIFIC ISLANDS INFORMATION RESOURCES

BARBARA K. BIRD

In the search for information, scientists are no longer dependent on traditional resources; computers have been incorporated into many facets of research, and libraries are no exception. To supplement the millions of pages of printed material available in books and journals in Hawaii's libraries, computerised literature searches now facilitate speedy access to millions of citations.

In the field of environmental sciences, there are several machine-readable data bases which store thousands of citations on botany, zoology, marine science, pollution, management of ocean resources, etc. Our difficulty in Hawaii has been to identify and retrieve from those large files the materials most appropriate to our island needs.

This presentation examines the Pacific Island Ecosystem (PIE) data base in light of its specific design and also in relation to other data files which it may overlap or supplement.

College of Tropical Agriculture
University of Hawaii at Manoa

STATUS OF ENDANGERED HAWAIIAN PLANTS

DERRAL HERBST

Five taxa of Hawaiian plants have been listed as endangered: Vicia menziesii, Haplostachys haplostachya var. angustifolia, Stenogyne angustifolia var. angustifolia, Lipochaeta venosa and Kokia cookei. Four additional species are presently being reviewed by the Washington, D.C. office as candidate endangered species: Euphorbia skottsbergii var. kalaeloana, Hibiscadelphus distans, Panicum carteri and Remya mauiensis. The euphorbia reproposal has been published in the Federal Register and comments are being solicited. It probably will

be our most controversial endangered plant because of its potential impact on the Barbers Point harbor. Listing packages are presently being compiled for two Diamond Head species: Bidens cuneata and Schiedea adamantis. A contract has been awarded to the Research Corporation, University of Hawaii, to develop listing packages for ten additional plants this coming year: Abutilon menziesii, Achyranthes splendens var. rotundata, Argyroxiphum sandwicense var. sandwicense, Cyanea superba, Gardenia brighamii, Gouania hillebrandii, Kokia drynarioides, Mezoneuron kavaiense, Santalum freycinetianum var. lanaiense, Scaevola coriacea. The 1975 Notice of Review has been updated and revised and will be published this year.

U.S. Fish and Wildlife Service
Office of Endangered Species

STATUS OF ENDANGERED SPECIES: INSECTS AND OTHER TERRESTRIAL INVERTEBRATES

WAYNE C. GAGNE

No species of Hawaiian terrestrial invertebrate has yet been officially declared as endangered, although 2 species of troglobites, a lycosid spider (Adelycosa anops) and a beachhopper (Spelaeorchestria koloana), as well as all species of the Oahu tree snail genus Achatinella are, or have been proposed to be added to the Federal endangered and threatened lists. Studies on the status of some of the other ca 8000 species of terrestrial invertebrates are now only being initiated. The author is principal investigator of a 2-year contract from the Federal Office of Endangered Species to investigate this aspect for native arthropods and to produce a listing of species that should be considered endangered or threatened. We are presently "truthing" pilot species groupings by selecting genera in each of the following ecological functional groups: aquatic or semiaquatic, anthophagous, phytophagous, predaceous, parasitic and detritivorous. On these we will develop an"Index of Rarity" and computerize the attendant data base before proceeding similarly with the remainder of the native arthropods. Factors contributing to endangerment (or extinction in many cases) of these invertebrates and the possible "weighting" of such factors will be discussed.

Entomology Dept.
Bishop Museum

HAWAII'S ENDANGERED TERRESTRIAL BIRDS

J. MICHAEL SCOTT

Hawaii has 21 species and subspecies of endangered land birds. They are found on the islands of Hawaii (7), Maui (5), Molokai (2), Oahu (2) and Kauai (6). The status of each of these species varies from extremely rare to common within a restricted and diminished range. With the recent surge of interest in and research on endangered birds by private, state and Federal agencies, we have available large amounts of information about the distribution, abundance, diseases, parasites, habitat preferences and feeding ecology of these species. Using this information, interagency groups have put together recovery plans for most species.

The threats to the continued survival of Hawaii's endangered forest birds vary, but habitat elimination and degradation is an important factor for every species. Many of the forest birds are found in the same areas. In fact, they frequently co-occur with many other endangered plants, invertebrates and Hawaii's only native land mammal. As an example of this, in the upper montane Koa forests of Hawaii no fewer than 5 of the 7 endangered forest birds found on that island as well as the endangered Hoary Bat and at least one of the endangered plants (Vicia menziesii) are all found in that single vegetation type. Given the large number of different endangered species which may occupy a single area, it is obvious that management strategies aimed at increasing the numbers of one species may well reduce the survival chances of another, equally endangered, species. Thus the soundest policy is for management for the long-term survival of naturally evolving forest communities. This requires that we think in terms of systems rather than single species. Island-wide programs need to be started in which the status of each major vegetational community is assessed. This type of analysis will allow early identification of threats and objective prioritization of our research and management efforts.

Mauna Loa Field Station
U.S. Fish and Wildlife Service

THE ENDANGERED HAWAIIAN WATERBIRD RECOVERY EFFORT

RONALD L. WALKER

The threats to the survival of the Hawaiian stilt, coot, and gallinule were brought to our attention in 1946 by Charles and Elizabeth Schwartz. They urged that habitat protection, marsh manipulation, and law enforcement be brought to bear on the problems facing the native Hawaiian waterbirds. Thirty years later the Hawaiian Waterbirds Recovery Plan (approved in June, 1978) recommended (1) habitat acquisition, development, and management, (2) reduction of inimical factors such as predation, poaching, and disturbance, (3) prevention or mitigation of the effects of new predators, diseases, and pollutants, (4) regular censusing and monitoring, (5) public information programs and (6) possible captive rearing.

Progress to date in implementing these recommendations has been slow, but significant. The U.S. Fish and Wildlife Service now has five National Wildlife Refuges on Kauai, Oahu, and Molokai purchased (or leased), developed and managed primarily for waterbirds. The State manages the Kanaha Wildlife Sanctuary on Maui, the Paiko Lagoon Wildlife Sanctuary on Oahu, and the Paradise Pacifica ponds on Kauai for endangered waterbirds. Cooperative agreements between the Federal, State, and Military levels of government account for waterbird refuges at the Kaneohe Marine Corps Air station, Bellows Air Force Base, and Lualualei Naval Ammunition Station on Oahu. Designation of new waterbird sanctuaries or refuges at Mana (Kauai), Salt Lake (Oahu), Kealia (Maui), and Opaeula (Hawaii) are pending.

Intensified management on existing waterbird areas including water control structures, moating, artificial nesting islands, fencing, and predator control have increased water productivity significantly. Cooperative (Federal, State, and private) censuses of over 265 waterbird habitats Statewide, in the summer and winter monitor population fluctuations. Studies of the breeding biology, food habits, nesting success, habitat requirements and movements of waterbirds have either been completed or are in progress.

Public awareness of the plight of Hawaiian waterbirds has increased with the provision of printed materials, illustrated talks by team members and other biologists, and the availability of the plan itself. Recently, the Honolulu Zoo in cooperation with the U.S. Fish and Wildlife Service and State Division of Forestry and Wildlife has successfully reared Hawaiian stilts in captivity and now has an endangered waterbird exhibit in place. Although these efforts have not yet resulted in removing any of the waterbirds from the endangered status, their situation at present is at least no worse than it was 30 years ago and there is optimism about their future if these programs continue.

Department of Land and Natural Resources
Division of Forestry and Wildlife

STATUS OF SEA TURTLES IN THE HAWAIIAN ISLANDS

GEORGE H. BALAZS

A research program focused on the Hawaiian population of green turtles (*Chelonia mydas*) since 1973 has provided considerable insight on migrations, growth rates, food sources, predation, terrestrial basking, and reproductive ecology. A basic component of this work is the use of corrosion-resistant Inconel 625 alloy tags for the individual identification of adults at the breeding site of French Frigate Shoals and immature turtles captured at foraging pastures throughout the 2450 km long Hawaiian Archipelago.

Both the range and size of the Hawaiian green turtle population have declined within historical times. As in other areas of Polynesia (as well as Micronesia and Melanesia), declines in sea turtles and other easily exploitable marine resources can be attributed to a breakdown in traditional conservation systems brought about by the introduction of cash economies, a decline of traditional authority, and the imposition of new laws and practices by colonial powers.

The hawksbill turtle (*Eretmochelys imbricata*) also occurs in coastal Hawaiian waters, but only in small numbers exclusively around islands at the southeastern end of the Archipelago. The leatherback (*Dermochelys coriacea*) is regularly recorded in offshore areas, but nesting is not known to take place within the Hawaiian chain.

All three species of Hawaii sea turtles receive legal protection under regulations of the Department of Land and Natural Resources, State of Hawaii, and the U.S. Endangered Species Act. A world conservation strategy recently developed for sea turtles offers potential for restoring populations to their former levels of abundance.

Southwest Fisheries Center Honolulu Laboratory
National Marine Fisheries Service
and
Hawaii Institute of Marine Biology
University of Hawaii

THE HAWAIIAN MONK SEAL, MONACHUS SCHAUINSLANDI

GILMARTIN, WILLIAM G.

The Hawaiian monk seal, Monachus schauinslandi, population has experienced a significant decline in the past 20 years with present seal counts approximately one half of those of the late 1950's. Major reduction in seals at the west end of the Northwestern Hawaiian Islands (Kure, Midway, and Pearl and Hermes Reef) have occurred while the population at French Frigate Shoals has increased. Decreases have been attributed to human disturbance, shark predation, ciguatera, and parasites.

Monk seals have been observed breeding in the nearshore waters; they give birth from late Decenber through mid-August (peaking between

March and May) and remain with and nurse their pups for about 5 weeks. Seals are away from the islands for varying lengths of time depending on the season and age/sex class of the animal. They feed on fish and invertebrates associated with the inner reef and outer reef slopes and have been found to dive to 120-170 m.

Because of the endangered status of the Hawaiian monk seal, critical habitat has been proposed and a Hawaiian Monk Seal Recovery Team has been formed to develop a recovery plan for the species.

Southwest Fisheries Center Honolulu Laboratory
National Marine Fisheries Service, NOAA

ISLAND ECOSYSTEMS: SOME ECOLOGICAL CHARACTERISTICS

DIETER MUELLER-DOMBOIS

During the International Biological Program (IBP), from 1971-1976, a multi-disciplinary research team from the University of Hawaii and Bishop Museum worked to discover some of the intrinsic biological organization aspects of island ecosystems. Emphasis was placed on the interaction of native and non-native species. Some 77 technical reports and an equal number of journal articles were published during this period. Late last year, a synthesis book on terrestrial island ecosystems was submitted from this group for review. It was accepted by an outside IBP review panel and will be published soon by Dowden, Hutchinson, & Ross.* Rather than summarize the findings described in this book, which would be hard to do in ten minutes, I will concentrate on a few points only:

a) A brief eco-geographic overview of island ecosystems,
b) Some distributional characteristics of island biota,
c) Ecosystem structure and function: the role of dominant endemics, and
d) Island ecosystem stability: impact of exotic species.

*ISLAND ECOSYSTEMS: Biological Organization in Selected Hawaiian Communities. Dowden, Hutchinson & Ross. IBP Synthesis Series, vol. 15. In Press.

Department of Botany
University of Hawaii at Manoa

HISTORICAL CHANGES IN THE HAWAIIAN ENVIRONMENT

H. ST. JOHN, Bishop Museum

(Abstract not available)

THE IMPACT AND MANAGEMENT OF FERAL ANIMALS AND INTRODUCED PLANTS IN NATIVE HAWAIIAN ECOSYSTEMS

RICK WARSHAUER and JIM JACOBI

The native hawaiian biota developed under extraordinary evolutionary conditions. As these volcanic islands have always been isolated from continental ecosystems by the vast expanse of the Pacific Ocean, only a very limited number of plants and animals capable of long-distance dispersal have chanced to become successfully established here. Due to this fact, the native biota which has evolved in Hawaii is very unique and comprised of an extremely large percentage of endemic taxa. Some examples of major components of continental ecosystems which have ever been part of the native Hawaiian biota include terrestrial vertebrates other than birds, and plants such as figs, bamboos, and conifers.

With the arrival of man in Hawaii, first the Polynesians over 1,500 years ago, and more recently European man, a great number of non-native species of both plants and animals have either been purposely or accidentally brought into the Islands. The establishment and interaction of these introduced species has in numerous cases caused drastic changes in the Hawaiian ecosystems with subsequent reduction in numbers, displacement of, or extinction of many of the native species.

In order to preserve the integrity of the remaining native ecosystems and their endemic components, a well developed management program with a state-wide overview must be initiated to control, or preferably to eliminate those exotic species which are identified as being extremely noxious. Additionally it is essential to restrict future intentional or accidental importation of other potentially dangerous species into Hawaii.

U.S. Fish and Wildlife Service

AVIAN DISEASES

CHARLES VAN RIPER
(presented by Dr. Clifford Smith, U.H. Dept. of Botany)

Only Plasmodium relictum is found in Hawaii Volcanoes National Park and adjacent areas. Unexposed Hawaiian birds (for example, Laysan Finch) are more susceptible to malaria than our species that have been previously exposed to the parasite. The 'i'iwi has less resistance to malaria than does the 'apapane. The 'amakihi and 'oma'o are the most resistant endemic species. Introduced birds are also very resistant to the parasite. Yearly patterns of mosquito abundance and avian malaria were closely related. Culex quinquefasciatus is the primary vector of avian malaria in Hawaii. Steps need to be taken by resource managers to eliminate potential mosquito breeding sites.

Cooperative National Parks
Resources Studies Unit
University of California at Davis

THE CORAL REEF INVENTORIES - AN APPROACH TO INFORMATION DISSEMINATION

ERIC B. GUINTHER

AECOS, under contracts to the U.S. Army Corps of Engineers (USACE), has been involved in the development and production of coastal zone information compilations concerned primarily with coral reefs and coral bottom assemblages. Presently completed or in progress are texts and accompanying atlases for the coasts of O'ahu, Maui, and the islands of American Samoa (the latter sponsored by the American Samoa Coastal Zone Program). The coral reef inventory (CRI) approach encompasses the following:

1. Literature review and annotation;
2. Supplemental field surveys;
3. Descriptive text covering physical and biological aspects, water quality, historical and archaeological sites, and ocean related activities and uses; and
4. An atlas of maps on a scale of 1" = 500 feet illustrating the geographical relationships of the above.

Like other information storage and retrieval systems, the CRI text is stored on a magnetic medium (8" flexible disks) and can be accessed by computer. Unlike most other systems, the end product is a printed text. The text can be widely disseminated to prospective users lacking ready access to a computer, yet the information can be updated as required.

The CRI text does not supplant existing bibliographic storage/retrieval systems, but draws from and supplements them. Basically, the CRI text reduces into short statements the results of environmental studies and surveys, use oriented material and surveys, and information not easily handled by bibliographic systems (e.g., personal communications, file notes). From this material, essential (basically descriptive) information is extracted, properly credited, and integrated with information from other sources into a readable text. Storage and retrieval are based on geographical location and information type (see item 3. above). For many users, the text may answer most or all questions regarding environmental concerns about a given area. For others, an extensive bibliography keyed to specific areas along the coastline will provide an efficient means of determining and locating existing source material.

AECOS, Inc.

CORAL REEF CONDITIONS IN THE PACIFIC

JAMES E. MARAGOS

Major impacts to Pacific reefs under U.S. control have resulted from dredging, filling, sedimentation, sewage and thermal discharges, military activity, oil spills, overfishing, and fishing with poisons and dynamite. The patterns of impact differ considerably for each major island group, depending upon physiography, population growth and distribution, economic development, and degree of government aid and regulation.

Because of the complexity of economic development in Hawaii, major stresses to reefs have been quite varied, particularly on Oahu. Sources of reef impact have included municipal waste discharges, especially in confined lagoons or embayments, thermal discharges on shallow reef, high levels of freshwater runoff and sedimentation where land clearing and high rainfall are prevalent, dredging and filling for air and sea transportation facilities and residential development, and generally heavy fishing pressure on reef resources.

In American Samoa, land ownership patterns, and recent development of air and sea transportation facilities have concentrated major reef impacts in the Pago Pago Bay and Pala lagoon areas of Tutuila. Pago Pago is also subject to sedimentation, sewage discharge, dredging, filling, and occasional oil spills. Elsewhere road construction on steep hillsides has caused landsliding and resultant sediment stress to reef areas.

The Mariana Islands, especially Guam, have been subject to extensive military and harbor construction which has impacted reefs. Thermal and sewage stresses to Guamanian reefs have also been documented. Exposure to frequent typhoon damage has also aggravated human derived impacts.

Limited economic development and government aid in the Caroline Islands (Palau, Yap, Truk, Ponape, Kosrae) have caused different stresses to reefs. The high cost and limited availability of building materials for roads, airports, and buildings has led to preferential use of accessible, "free" reef materials which has resulted in serious impacts from dredging and filling. Rapid growth and the drift of pupulation to urban centers has also intensified stresses to adjacent reefs, particularly port development, sewage discharge, and landfilling for residences, churches, etc. Fishing with dynamite has also been reported from the region.

The scarcity of land on the atolls of the Marshall Islands and other U.S. possessions (Palmyra, Wake, Midway, Johnston) have also spurred dredging and filling for residential areas, ports, runways, roadways, and building materials. Significant military activity and weapons testing since World War II has also caused considerable impact to reefs (e.g., Enewetak, Bikini, Kwajalein). Lagoon discharge of municipal sewage may also be a problem on certain atolls with high populations (e.g., Kwajalein and Majuro).

Haphazard economic development and government control, coupled with inadequate study and planning for reef resource use will tend to encourage further destruction of reef ecosystems in many parts of Micronesia. Burgeoning population growth and the islanders' dependence on reef resources for subsistence further underlines the need for reef conservation. More organized government assistance and control, greater scientific study of reef impacts and resource inventories, and manpower training and development appear to be several of the major actions required to reverse existing trends.

U.S. Army Corps of Engineers
Pacific Ocean Division

REEF ENVIRONMENTS - EFFECTS OF SILTATION AND RUNOFF

PAUL BARTRAM

Freshwater and sediment discharged from the land into reef environments are naturally-occuring "effluents" reaching the ocean from widely-distributed sources and in varying quantities related to rainfall patterns. Marine environments are not equally susceptible to the effects of land runoff. Two broad classes of marine environments can be recognized: (1) rough waters of open coasts where wave action and currents carry away the smaller, lighter particles of sediment and freshwater runoff is rapidly diluted and mixed; and (2) quiet waters of sheltered bays and other settings where waves and currents are too weak to rapidly dilute freshwater and small grains of sediment are deposited.

Sheltered reef environments receiving runoff from one or more perennial streams are generally inhabited by marine species which are adapted to large, natural fluctuations in water conditions. Persistent effects of non-storm or low flow is often detectable only near stream mouths. Detrimental effects to reef areas away from stream mouths are limited to extreme floods of infrequent occurence, although such storms can be catastrophic (e.g., the damge to shallow marine life which occurred in Kane'ohe Bay in May 1965).

Low-salinity water entering sheltered reef environments during flooding will tend to remain close to the surface, so that damage is usually limited to shallow reef organisms. However, reef flats are especially vulnerable to damage at low tide, when bottom dwelling organisms are closest to the water surface.

Extreme floods also have the potential for causing siltation of outer reef flats, where reef-building organisms (principally corals and coralline algae) are concentrated. Deposition of large volumes of flood-borne sediment may cover hard bottoms, altering them to soft bottoms for some period of time. Sediments provide no firm anchoring sites for reef organisms which attach to solid bottoms, nor do they provide cover sought by small fishes. Sediment loads insufficient to completely bury hard bottoms may nonetheless kill attached or encrusting organisms which are unable to survive more than a few millimeters of cover by silt. Bacteria quickly use up the supply of oxygen below the surface of mud deposits and oxygen-free (anaerobic) conditions develop. Death of reef organisms results from oxygen depletion.

Extensive removal of vegetation and erosion of watershed areas, coupled with installation of man-made drainage systems to speed runoff downslope and downstream, can result in more frequent repetition of flood damage by magnifying the effect of smaller storms.

AECOS, Inc.

DESTRUCTIVE FISHING METHODS

RICHARD E. BROCK

Coral reef fishes are a renewable resource that may be successfully exploited and with appropriate management, this pursuit may have little negative impact on the other components of the reef systems. Techniques of coral reef fisheries management are, however, in their infancy and much remains to be done. Man in his exploitation of the fishery resources of reefs has not only frequently overfished and depleted these resources but has developed a number of capture techniques that may affect the entire coral reef community. The most deleterious of these destructive methods are the use of poisons and dynamite. Other techniques harmful to fish only, include the application of certain intoxicants specific to fish, use of small mesh monofilament nets and the loss of portable traps which continue to fish for years.

Hawaii Institute of Marine Biology
University of Hawaii at Manoa

IMPACT OF SEWAGE ON CORAL REEFS

STEPHEN V. SMITH

The effect of sewage on ecosystems can be either nutritional or toxic (or both). The major input of sewage on most Pacific coral reefs is domestic, probably with relatively low levels of toxins, so the primary environmental effect is therefore likely to be nutritional. Thus, sewage input to reef ecosystems favors organisms, particularly plankton, with rapid nutrient uptake characteristics. The rate of net biomass production and either washout or sedimentation will approximate the rate of loading by the most limiting nutrient (usually nitrogen). Productivity will be sustained well above the loading rate by rapid internal nutrient cycling.

Growth of the plankton lowers water clarity and delivers nutrients to the reef benthos community largely by the sedimentation of particulate organic materials. Both decreased light and increased particulate fallout in response to sewage loading favor the buildup of a detritovore and filter-feeding epifaunal community which erodes reef rock. The conversion of hard substratum to unconsolidated materials can eventually limit the accumulation of infauna, epifauna, and reef fishes which depend on hard substrata for shelter. Some rapidly growing benthic algae may also flourish locally, apparently responding to both dissolved nutrients In the water and to elevated nutrient regeneration by the macro and microheterotrophs. However, the net shift of the reef benthos community seems to be generally towards heterotrophy.

Available evidence suggests that reef biomass is relatively rapidly responsive to sewage diversion. Responses of biological composition may be slower than biomass responses if the nutrient subsidy, cumulative heterotrophic biomass buildup, and consequent bioerosion have altered the substratum excessively.

Hawaii Institute of Marine Biology
University of Hawaii at Manoa

DREDGING IN CORAL REEF AREAS

JOHN S. RAVINA

Background: Reef areas in Hawaii and Pacific Islands consists mainly of unconsolidated coral limestone debris to hard coral limestone or cemented limestone fragments. In our areas of jurisdiction various methods and equipment have been used to dredge reef areas.

Discussion: Review of cutterhead dredges, clamshell, dragline, spudding, explosives and spiders.

U.S. Army Corps of Engineers
FM&S Branch

THE ENVIRONMENTAL EFFECTS OF DREDGING AND QUARRYING ON PACIFIC ISLANDS

GEORGE S. LOSEY JR.

Dredging and quarrying operations must destroy or drastically alter existing habitats. Past dredging operations on tropical Pacific islands offer examples of everything from widespread and long lasting destruction to the creation of new productive habitats that are of use to man.

Meck I. (Kwajalein Atoll) is typical of destructive subtidal dredging in an open lagoon site. Impact probably resulted both from the methods and the scale of the operation. From 1964 to 1969, suction dredge and causeway dragline operations removed nearly all of the lagoon terrace. In 1972, the remaining slope was primarily flat pavement with precipitous drops to a sandy rubble bottom. Reefs downstream of the dredging operation were heavily impacted for about 3/4 mile.

Pou Bay (Moen I., Truk) illustrates destructive dredging of an area with poor circulation. Continuous dredging of a sheltered inlet has resulted in a large silt covered basin up to 8 m deep. Recolonization by marine life over a 5 to 20 year period was restricted to algae and a few fish.

Harbor dredging at Illeginni I. (Kwajalein Atoll) shows far less destruction of habitat. Siltation damage to the reef was limited to a 10 to 20 m band on either side of the dredge site. Good planning and water circulation probably prevented massive damage.

Reef flat quarries can add valuable habitat that is useful for subsistence fishing. Shallow quarries that include much cover and consolidated material such as at Enewetak Atoll are quickly recolonized. Deeper quarries with a largely sand and silt bottom appear to discourage recolonization and form little more than a sheltered swimming pool.

Department of Zoology and
Hawaii Institute of Marine Biology
University of Hawaii at Manoa

ECOLOGY OF PACIFIC ISLAND STREAMS

ROBERT A. KINZIE III

There are two underlying concepts around which we must construct our ideas of the ecology of Pacific island streams. The first is that introduced by the limnologist H.B.N. Hynes; the study of a stream cannot be considered apart from the valley in which the stream lies. That is, streams and their drainage areas are really a singly entity and must be viewed as such. The second concept relates to the body of thought stemming from the recent interest in island biogeography. Certain sorts of habitats or systems e.g. caves, mountain tops, lakes and streams are thought to be analogous to true islands in that they are separate spatially and may represent replicates in the long term experiments carried out by the adaptive process.

With these foundations laid we may begin to construct our framework of Pacific island stream ecology. The first concept: the stream in its valley, can be broadened to include, in many cases, the entire island geologic history and the surrounding oceanic and meterological processes. Pacific island streams are strongly influenced by the processes that form, shape and ultimately consume the islands where they flow. The streams in turn are primary forces shaping the islands. From the viewpoint of island biogeography, Pacific island streams can be thought of as "islands on islands".

Turning to more concrete aspects of the ecology of island streams, the first striking thing is that the macrofauna of Pacific island streams is not particularly rich except for the predictably striking insect component. Primary division fresh water fishes are of course lacking and, except near the margins of the Pacific Plate, the fishes are characteristically derived from close marine ancestors. Much the same can be said for the molluscan and crustacean component of Pacific island streams. While there is a fairly diverse fauna of relatively inconspicuous amphipods and isopods and several groups of small snails, the larger invertebrates like the fishes are distinctly marine in their affinities. In fact, in Hawaii, where Dr. J. Maciolek has pioneered limnological studies, it has been shown that all the native stream fishes, the large neritid snail and both large native crustaceans are diadromous. That is, all require that their larvae spend a period of their lives as members of the marine planktonic community. After this larval period in the sea, the length of which is still a mystery, the juveniles return to a stream and make their way back up to the higher stream reaches where they mature and renew the cycle. The evolutionary link with the sea is thus renewed in each individual as part of an ecological chain.

Zoology Department
University of Hawaii at Manoa

ENVIRONMENTAL CONDITIONS OF PACIFIC STREAMS

JOHN I. FORD

Pacific island streams are perhaps the least well known ecosystems within Oceania. Recent field studies conducted by the Fish and Wildlife Service and the Army Corps of Engineers have characterized the physico-chemistry and biology of principal watersheds in Hawaii, Guam and American Samoa. These investigations have given particular attention to the effects of land and water uses and watershed development upon the indigenous fauna of these areas.

The most common types of cultural modifications to stream courses throughout the Pacific are surface catchments and culverts under roads. Channel alterations and dewaterment have seriously affected Hawaiian stream ecosystems; roughly 15% of the 365+ perennial streams in Hawaii have suffered some form of habitat destruction (over 85% of Oahu's streams have been so impacted). Large-scale dewaterment seriously threatens remaining streams and endemic stream fauna on Oahu and Maui islands, in particular. Increasing urban development and population growth in Southern Guam is creating similar pressures for water supply and flood control. The relatively tiny streams (less than 1 sq mile watershed area) of American Samoa support the highest diversity of aquatic life of all Pacific streams which have been investigated in detail. The existing level of development in American Samoa has not led to significant degradation of streams and loss of indigenous fauna. However, recent road construction has destroyed some stream habitat through excessive soil erosion.

Future research efforts on Pacific Island streams should include the high islands within the Trust Territories, and the Northern Mariana Islands. Wise management of these unique aquatic resources can be effected through adoption and enforcement of instream flow and water quality standards, and sound land use policies.

U.S. Army Corps of Engineers,
Pacific Ocean Division

EFFECT OF STREAM HABITAT ALTERATION ON FISHES AND DECAPOD CRUSTACEANS

AMADEO S. TIMBOL

Tropical, insular streams such as those in Hawaii are especially vulnerable to modern cultural inroads. Native stream fishes and crustaceans are diadromous. These animals need suitable pathways from the stream to the ocean and back to the stream.

Four major types of channel alteration have been recognized in Hawaii: lined channel, vegetation removed-channel realigned, revetment, and culverts. Altered streams were found to harbor more species than unaltered streams. A high percentage of species in altered streams are introduced, while a high percentage of native species characterized unaltered streams. The most pernicious of these channel modifications is the lined channel, a structure whereby concrete cement replaces both natural banks and stream bed. In such structures, water attains temperatures up to 36°C. Laboratory studies showed that lethal temperatures in which there is a 50% mortality (LD_{50}) in native fishes and crustaceans are between 34° and 36°C. Introduced species such as poeciliids and tilapia begin to die at higher temperatures (LD_{50} at 41° and 43°C, respectively).

Habitat alterations favor introduced species (mostly trash fishes) over native species. Several of the native species have both economic and intrinsic values (e.g. nakea goby, Awaous stamineus).

(Hawaii Cooperative Fishery Research Unit)
Hawaii Institute of Marine Biology
University of Hawaii at Manoa

WATER DIVERSION

L. STEPHEN LAU

(abstract not available)

U.H. Water Resources Research Center

WETLANDS - WATER AND NUTRIENT BUDGET

DAVID CREER

One important function of wetland communities is to act as a buffer at the land/water interface. This buffering activity is manifested in removal of suspended solids and nutrients washing out of upland watersheds and can be illustrated by calculating water, suspended solids, and nutrient budgets for major influents and effluents to the community. Using Kawainui Marsh as an example it can be shown that sewage effluents are the major inputs of phosphorus and nitrogen (95 and 88 percent, respectively). Kawainui Marsh retains 72 percent of influent phosphorus but only 12 percent of influent nitrogen. (Wetlands, such as Kawainui, have some potential for nutrient scrubbing of sewage effluents.) Unfortunately, the capacity for nutrient removal of Kawainui Marsh is insufficient to prevent most of the nitrogen of sewage origin from entering Kailua Bay. This excess nitrogen passing through the marsh has substantial potential for fertilizing Kailua Bay inasmuch as nitrogen is the limiting nutrient in nearshore marine environments. In the future, water quality problems experienced in Kailua Bay will probably be widely attributed to the Mokapu outfall. However, the nutrient budget of Kawainui Marsh suggests that Kawainui Canal is a more likely source for unwanted fertilization of Kailua Bay.

AECOS, Inc.

WETLAND VEGETATION AND THE NATURAL HISTORY OF HAWAII'S WETLANDS

MARGARET E. ELLIOTT

The Hawaiian Islands host relatively few areas of wetland and few native coastal wetland plant species compared with other major Pacific Islands. This is due in part to physical geographic characteristics and Hawaii's unique isolation from other land masses. Inland, porous soils, steep topography, and a high rate of organic matter decomposition prevent the accumulation of watersaturated mineral or organic soils and corresponding water-tolerant flora except in areas of high rainfall, cool temperatures, high water table, and/or impeded drainage. Along the coasts, high wave energy, porous substrate, and narrow intertidal zones restrict coastal wetland development to older, more protected island shores. Despite these limiting factors, wetlands can and do occur in Hawaii, regrettably less so today than in the past. Their occurrence and vegetative formations provide interesting clues to the natural history of these isolated Pacific island ecosystems. In the upland bogs, for example, rare and unusual plant assemblages have evolved in a harsh, wet, cloudy, cool environment. Native plant and animal species may still be found in these areas despite significant damage wrought by exotic plant

and animal introductions. Low-elevation inland and coastal wetlands, on the other hand, bear a history of disturbance and alteration since earliest human occupation of the Hawaiian Islands. Their plant assemblages have developed from originally few natives adapted to coastal wetland conditions, followed by early use of wetlands for agriculture and aquaculture; rapid niche occupation by introduced species; and subsequent deterioration or destruction of many areas through weedy infestation, sedimentation, drainage alteration and filling.

Vegetation, as a physical expression of wetland conditions, is useful today in determining the significance of wetlands as wildlife habitat, organic producer, water purifier, aesthetic component, or laboratory for scientific observation. There is great potential for enhancement of wetlands through careful manipulation of vegetation. While this may do little to recover lost areas, it offers hope that Hawaii's wetlands will continue to be a natural legacy for generations to come.

Department of Geography
University of Hawaii at Manoa

WATERBIRDS AND HABITAT CONDITIONS IN HAWAII

RICHARD A. COLEMAN

A major shift in wetland habitat management is underway in the 1980's. The earlier policy of land aquisition and custodial maintenance of these wetland areas is evolving into an active habitat management effort. Federal, State and County governments are coordinating efforts to determine optimum habitat requirements of the endangered Hawaiian waterbirds and to effect habitat modifications to reflect these findings. Current key management efforts by the State Department of Land and Natural Resources at Kanaha Pond on Maui and by the U.S. Fish and Wildlife Service at Pearl Harbor and James Campbell National Wildlife Refuges on Oahu, reflect this commitment to improve the productivity and achieve the optimum use of these vital wetlands. Research efforts to better clarify habitat management objectives include a major study of Hawaiian stilts and Hawaiian coots, a behavioral ecology study of the Hawaiian gallinule, a controlled Koloa/mallard hybridization study, and a Hawaiian stilt captive rearing study. Improvement to waterbird census techniques are being implemented to better evaluated productivity. Additional studies are needed to answer current management questions, including predation of yound waterbirds by black-crowned night heron, waterbird predation in aquaculture and wetland agriculture areas, and field assessments of the Koloa hybridization threat by feral mallards.

U.S. Fish and Wildlife Service

WATERBIRDS AND HABITAT CONDITIONS IN THE PACIFIC

ROBERT J. SHALLENBERGER

This paper is somewhat arbitrarily restricted to a consideration of waterbirds and habitat on islands of the Pacific, excluding Hawaii, which are under some form of United States jurisdiction. Principal species involved include resident and/or migratory birds of the families Ardeidae (herons, egrets), Anatidae (ducks/geese), Rallidae (rails, coots, gallinules), Charadriidae (plovers), and Scolopacidae (sandpipers, snipes). Wetlands are scarce on low, coralline islands and on high islands are confined largely to coastal areas where a long history of human habitation has left little habitat unaltered by agriculture or other activities. Effective conservation of waterbirds and dwindling habitat on Pacific islands is hindered by the lack of adequate baseline data, limited regulatory authority, diverse socio-cultural conditions, limited funding resources and the uncertain political status of territories. These constraints necessitate a somewhat innovative, shotgun approach to management of wetlands and waterbirds which will include baseline research, local/federal regulatory control, environmental education, habitat acquisition, project mitigation, landowner assistance and captive propagation. Examples are drawn from ongoing programs in American Samoa, Guam and the Northern Marianas.

U.S. Fish and Wildlife Service

GEORGE R. ARIYOSHI
GOVERNOR

HIDETO KONO, Interim State
MARINE AFFAIRS COORDINATOR

STATE OF HAWAII
MARINE AFFAIRS COORDINATOR
OFFICE OF THE GOVERNOR
P. O. BOX 2840
HONOLULU, HAWAII 96803

July 27, 1977

Mr. George H. Balazs
Hawaii Institute of Marine Biology
P. O. Box 1346
Kaneohe, HI 96744

Dear George:

The Marine Affairs Coordinator would appreciate receiving a copy of your report of the SPC Marine Turtles Project which was based in Fiji and the Cook Islands.

We commend you on your fine work and will acknowledge the letter of appreciation sent to us from Dr. Frank Mahony.

Sincerely,

Charlyn Iyo

CHARLYN IYO
Assistant to the MAC

Attachment

CABLE ADDRESS:
"SOUTHPACOM," NOUMEA

ADRESSE TELEGRAPHIQUE:
"SOUTHPACOM," NOUMEA

SOUTH PACIFIC COMMISSION
POST BOX D.5
NOUMEA CEDEX
NEW CALEDONIA

COMMISSION DU PACIFIQUE SUD
BOITE POSTALE D.5
NOUMEA CEDEX
NOUVELLE-CALEDONIE

In reply, please quote PRO 84/9/1

PLEASE ADDRESS REPLY TO
THE SECRETARY-GENERAL

8 July, 1977

Dr. J. Bardach
Director
Hawaii Institute of Marine
Biology,
P.O. Box 1346
KANEOHE, Coconut Island
Hawaii. 96744 U.S.A.

Dear Dr. Bardach,

From 21 February to 12 March 1977, at the request of the South Pacific Commission, Doctor George H. Balazs conducted an advisory study of the SPC Marine Turtles Project based in Fiji and the Cook Islands. The purpose of this study was to establish guidelines for the future of the Project and to recommend other possible action in this field.

We wish to express to Dr. Balazs personally and to those who made his services available to us, our deep appreciation of the work he accomplished. Not only did Dr. Balazs scrupulously adhere to the terms of reference assigned to him, but he produced a very fine report containing a comprehensive evaluation of turtle stocks in the Pacific and related conservation problems. We were most impressed by the quality of his work and by the value of the conclusions and recommendations he submitted.

For all this, Dr. Balazs amply deserves our praise and gratitude. Our thanks also go to the Institute of Marine Biology, for agreeing to release Dr. Balazs from his normal professional commitments for the duration of his study. Now that co-operation between the Institute and the SPC has been proved so successful, we shall certainly take the liberty of again calling upon your assistance should similar occasions arise.

Yours sincerely,
F. MAHONY

Dr. Frank Mahony
Acting Secretary-General

cc: Dr. Balazs
Hawaii Institute of Marine
Biology,
P.O. Box 1346
KANEOHE, Coconut Island

SAME LETTER TO:

Mr. H. Kono
Governor's Marine Affairs Co-ordinator
1136 Union Mall
HONOLULU - Hawaii. 96813, USA.

NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory

February 19, 1982

SEMINAR ANNOUNCEMENT

Title: Marine Turtle Movies (2)

Speakers: George H. Balazs and William G. Gilmartin

Date: Friday, February 26, 1982, 10:30 a.m.

Place: Seminar Room 221
Honolulu Laboratory
2570 Dole Street

Two professionally produced 20-minute movies that illustrate various ecological aspects of sea turtles will be shown. The films will be introduced by George Balazs and William Gilmartin of the Honolulu Laboratory's Marine Mammal and Endangered Species Investigation Task. A discussion period will follow.

UNION INTERNATIONALE POUR LA CONSERVATION DE LA NATURE ET DE SES RESSOURCES
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

Commission du service de sauvegarde – Survival Service Commission

Dr George H.Balazs
Hawaii Institute of Marine
Biology
P.O. Box 1346
Kaneohe, Hawaii 96744
UNITED STATES

17 December 1981

Dear Dr Balazs

You should by now have received the triennial report of the Chairman of SSC which was presented to the 15th Session of the IUCN General Assembly in October, in Christchurch, New Zealand. As you will have noted from the report, this has been a very active period for SSC. I send my warm appreciation for the contribution that you have made to this solid record of achievement.

As stated in the IUCN Regulations, your term as Deputy Chairman to the Marine Turtle Specialist Group expired at the time of the General Assembly in October. However, I would be most pleased if you were able and willing to serve for a further three-year term in the same capacity, with Prof. A. Carr as Chairman of the Group.

I wish to reiterate my thanks for your services over the past triennium and look forward to receiving your decision, which I hope will be affirmative.

Sincerely yours,

Grenville Lucas

Grenville Lucas
Chairman
Species Survival Commission

UNIVERSITY OF FLORIDA
GAINESVILLE, 32611

DEPARTMENT OF ZOOLOGY
223 BARTRAM HALL
904-392-1107

February 4, 1982

Mr. George Balazs
P.O. Box 1346
Kaneohe, HI 96744

Dear George:

We all thing there ought to be a Deputy Chairman and that you must be it. So please don't get obstinate. I enclose a copy of a relevant letter from Grenville Lucas, and my reply. You ought to be chairman, but I'll give it another try.

I've just heard that Cayman Ltd. has hired a really high-powered legal firm, Pacific Legal Foundation, to fight for its right to export to the U.S.. The USFWS is pretty sure the new firm will win out. It is a gang of cronies of Watt's.

It is rumored that Suarez was declared non grata in Mexico and has left.

I enclose a sprightly document that may cheer you up.

Best regards, Deputy.

Sincerely yours,

Archie Carr
Chairman
Marine Turtle Specialist Group
IUCN

AC/ljw
encls.

Phil — Just indicate errors in content. We will do the rest. Thanks, Sr. Edna

Submitted to J. Miller 12 JAN 82

HAWAIIAN ACADEMY OF SCIENCE

SEVENTH ANNUAL STUDENT SYMPOSIUM ON MARINE AFFAIRS

DEC 24 '81 AM

MEMO TO: *Phil Helfrich*

FROM: The Symposium Committee

Thank you for offering to critique student papers submitted for the Seventh Annual Student Symposium on Marine Affairs. ~~This envelope contains pa[illegible] with an evaluation sheet for each.~~ REC'D H.I.M.B.

Please concentrate on CONTENT. Write your comments in the margins or on a separate sheet. Advise the students; but do not try to rewrite their paper. That is the student's job. The Symposium Committee will go over the paper for grammar, spelling, and format. *NOT*

Please use BLACK ink so that we can retain a photocopy of your notes and evaluation sheets to aid us in checking the rewritten paper.

We encourage students to make use of their own previously-done work, e.g., research done for a science fair project; but often students do not realize that raw data and notebooks of such projects need to be digested, summarized, and the discussion amplified to suit a publication or symposium style.

Papers based entirely on library work should nevertheless reflect originality in interpretation and discussion.

In dealing with poorly conceived or poorly written papers, try to be helpful and positive. Avoid over-severity which may leave the student too discouraged to try again; and over-leniency which condones sloppy research and reporting.

Sometimes students make use of procedures, data, and opinion found in magazines, texts, and laboratory manuals without citing the source. If you doubt the originality of an otherwise worthwhile paper, we can arrange a phone interview.

Please return these reviewed papers and evaluation sheets to us no later than JANUARY 5, 1982. We want them by then.

Completed papers may be sent to:

Jacquelin Miller Environmental Center Gartley 317 CAMPUS MAIL	or to	Symposium Committee Hawaiian Academy of Science Box 19073 Honolulu, Hawaii, 96817

If you have questions, call:

Jackie Miller on workday mornings at the Environmental Center: Telephone: 948-7362

or residence: 396-0033

Sister Edna at HAS Office on Mondays or Thursdays: 537-1330

or residence: 845-0065

Papers which are no more than straight copy work from books will be grouped in their own session as "BOOK REVIEWS"

George,

Hope you can make it!

J. Brock
8678

Zoology 200
Marine Biology
Tentative Schedule

		Lectures: 10:30-11:20 Edm.355	Week	Labs: 1:30-4:20 Edm. 361
Jan.	19	Introd. Marine Environment	1	Introductory remarks; Seaweeds
	21	Phytoplankton & Productivity		
	26	Zooplankton	2	Plankton
	28	Ocean currents, tides (Dr. E. Stroup)		
Feb.	2	Algae	3	Field Trip-Wailupe, Niu
	4	Soft sediment communities		
	9	Reef Invertebrates I	4	Reef Invertebrates
	11	Reef Invertebrates II		
	16	Intertidal I	5	Field Trip-Kewalo
	18	Intertidal II		
	23	Mid Term I	6	Corals, coral communities
	25	Hawaiian ponds, estuaries		
Mar.	2	Coral reefs I (Dr. R. Kinzie)	7	Field Trip-HIMB, Kaneohe
	4	Coral reefs II		
	9	Coral reef ecology	8	Ichthyology lab.
	11	Fish I (Dr. R. Brock)		
	16	Fish II (Dr. R. Brock)	9	Deep sea lab., movie
	18	Deep Sea (Dr. D. Karl)		
		Spring Recess- March 22-27		
Mar.	30	Mid Term II	10	Field Trip-Aquarium and reef
Apr.	1	Marine birds/reptiles		
→	6	Turtles (George Balazs)	11	Birds, reptiles, mammals
	8	Marine Mammals		(Sat?)
	13	Pollution I (Dr. W. Kimmerer)	12	To be scheduled
	15	Pollution II		
	20	Fisheries management, yields (Dr. R. Brock)	13	Visit to an aquaculture facility
	22	Aquaculture, FW.		
	27	Aquaculture, Marine	14	Lab exam
	29	Utilization of marine resources (Dr. J. Bardach)		Lab exam
May	4	Review	15	

May 11, Final Exam, 9:45-11:45 AM in Edm. 355.

SCHOOL OF NATURAL & MATHEMATICAL SCIENCES

SEATTLE PACIFIC UNIVERSITY

(206) 281-2140 - SEATTLE WASHINGTON 98119

25 Dec. 1981

Dear George:

I received the packet full of your materials on turtle research. I appreciate having those and will use them.

I speak for myself and for everyone else in thanking you for coming to Mass and giving your ekellent illustrated talk. It was well received and enjoyed by everyone. You surely made a lot of turtle converts. All the students commented favorably on your talk. What I am trying to say is that they understood everything you said, whereas they did not in my 3 lectures to them.

Thanks so much. Hope to meet you again.

Ron Phillips

SEATTLE PACIFIC COLLEGE
Seattle, Washington 98119

Department of Biology

University Bulletin

UNIVERSITY OF HAWAII / HONOLULU, HAWAII 96822

Volume 52, Number 15
December 7, 1981

CALENDAR OF EVENTS
December 7 - 14

Monday, December 7

Winter dreams, a display of decorated Christmas trees. Gallery hours are 8 a.m. to 10:30 p.m. Monday through Friday and 8 a.m. to 4:30 p.m. on Saturday. The display continues through December 12. Campus Center Gallery.

Exhibition of Tahitian artifacts belonging to the Pomare family, the royal family of Tahiti. Gallery hours are 10 a.m. to 4 p.m. Monday through Friday and 12 noon to 4 p.m. Sunday. The exhibit ends December 10. Commons gallery in the Art building.

Center for Asian and Pacific Studies' Southeast Asian Studies brown bag lecture. "Indonesia: A Journalist's Misadventures in Paradise" by Paul Zach, former Gannett Fellow in Asian Studies at the University of Hawaii. 12:30 p.m., Webster 111.

Microbiology seminar. "Study of Pineapple Juice Fermentation for Ethanol Production" by Indriati Ekasari, graduate student in microbiology. 3:30 p.m., St. John 11.

Chemistry seminar. "The Total Synthesis of Maytansine" by Minoru Isobe of Nagoya University. 3:30 p.m., Bilger 342.

Film, "Miracle on 34th Street." Admission: $2 general, $1.50 students with valid UHM identification. 7 and 9 p.m., Hemenway theatre.

Tuesday, December 8

Linguistics seminar. "Quantifier Float in Japanese" by John Haig, assistant professor of Japanese. 12 noon, Moore 120.

Geography colloquium. "'The River': Classic Documentary on Conservation and Water Management in the Thirties" by Daniel B. Luten, visiting professor of geography. 12 noon, Porteus 443-B.

Women's studies colloquium. "The Development of Women's Programs in the Pacific" by Judith Whitmore, acting principal, Community Education Training Centre, South Pacific Commission. 3 p.m., Porteus 704-F.

Film, "Miracle on 34th Street." Admission: $2 general, $1.50 students with valid UHM identification. 7 and 9 p.m., Hemenway theatre.

Wednesday, December 9

East-West Center seminar series. "How Pacific Island Communities Cope with Natural Disasters" by Michael Hamnett, assistant to the dean of student affairs and open grants and staff member of the E-WC Pacific Islands Development Program. 12 noon, Jefferson Hall, rooms A and B.

History forum. "Trends in Philippine Historical Writing" by John Larkin, visiting fellow, Center for Asian and Pacific Studies. 3 p.m., Sakamaki A-201.

Oceanography colloquium. "Chemical History of Seawater" by Fred T. Mackenzie, professor of oceanography. 3:30 p.m., Watanabe 112.

Film, "M*A*S*H." Admission: $2 general, $1.50 students with valid UHM identification. 7 and 9 p.m., Hemenway theatre.

Thursday, December 10

East-West Center Thursday preview. "Learning from Those 'Imitative' Japanese" by Robert A. Rosenstone of the California Institute of Technology and E-WC research fellow. 12 noon, Burns 4005.

Seminar on East Asian languages. "Teaching of Japanese Speech Levels" by Shozo Kurokawa, assistant professor of Japanese. 12:30 p.m., Center for Korean Studies auditorium.

Final orals for Thomas J. Cogan in Asian languages -- Japanese literature. Dissertation title: "A Study and Complete Translation of the Soga monogatari." 2:30 p.m., Moore 365.

Biochemistry seminar. "Purification of Erythropoitin" by Dr. Jeffrey Nakamura of Queen's Medical Center. 4 p.m., Biomed T-210.

Film, "M*A*S*H." Admission: $2 general, $1.50 students with valid UHM identification. 7 and 9 p.m., Hemenway theatre.

Intercollegiate basketball. University of Hawaii vs. Pacific Lutheran University. Admission varies with type of seating. 7:40 p.m., Blaisdell arena.

University Theatre presents Brian Clark's "Whose Life Is It Anyway?" Admission: $6 general, $4 students and senior citizens, free for university students with valid identification. 8 p.m., Kennedy theatre.

Friday, December 11

Final orals for Mark Boardman in biochemistry/biophysics. Dissertation title: "Regulation of Gene Expression during Sea Urchin Embryogenesis Involves a Change in Abundance of Several Hundred mRNA Molecules." 10 a.m., Biomed T-211.

National Marine Fisheries Service seminar. "Sea Turtles and their Traditional Usage in the Tokelau Islands" by George H. Balazs, assistant marine biologist, Hawaii Institute of Marine Biology. 10:30 a.m., 2570 Dole Street, room 221.

Final orals for Ron Fenstemacher in chemistry. Dissertation title: Polyene Photochemistry: Solvent Controlled State Ordering." 11 a.m., Bilger 342.

Joint CTAHR family farming systems group and EAPI project on human interactions with tropical ecosystems brown bag lecture. "Application of Farming System Methodology" by Jim Litsinger. 12 noon, St. John 11.

Institute for Astronomy colloquium. "Nuclear Activity on NGC 1068: Are There Two Independent Powerful Infrared Sources?" by E. Becklin. Refreshments in library at 3:30 p.m., colloquium in room B-129 at 3:45 p.m., 2680 Woodlawn Drive.

Mathematics colloquium. "Random Finite Groupids" by Robert W. Quackenbush of the University of Manitoba. 3:30 p.m., Keller 401.

Film, "King of Hearts." Admission $3.50. 7 and 9 p.m., Physical Science auditorium.

Film, "Superman II." Admission: $2 general, $1.50 students with valid UHM identification. 7 and 9 p.m., Hemenway theatre.

University Theatre presents Brian Clark's "Whose Life Is It Anyway?" Admission: $6 general, $4 students and senior citizens, free for university students with valid identification. 8 p.m., Kennedy theatre.

Saturday, December 12

Exhibit of Korean dolls in Yi Dynasty costumes. 10 a.m. to 5 p.m., Center for Korean Studies, second floor.

Film, "Superman II." Admission: $2 general, $1.50 students with valid UHM identification. 7 and 9 p.m., Hemenway theatre.

Film, "King of Hearts." Admission $3.50. 7 and 9 p.m., Physical Science auditorium.

NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory

November 24, 1981

SEMINAR ANNOUNCEMENT

Title: "Sea turtles and their traditional usage in the Tokelau Islands"

Speaker: Mr. George H. Balazs

Date: Friday, 12/11/81, 10:30 a.m.

Place: Seminar Room 221

Mr. Balazs is currently affiliated with the Honolulu Laboratory under an IPA agreement with the Hawaii Institute of Marine Biology (University of Hawaii). His presentation will cover the results of a recent study visit to the Polynesian atolls of Fakaofo, Atafu, and Nukunonu.

SEA LIFE PARK

October 12, 1981

Mr. George Balaz
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, HI 96744

Dear George,

You did it again! Another great lecture on sea turtles for our Volunteer Docent Workshop. All of us, whether staff, veteran docent or new docent enjoyed the enthusiasm you bring to your topic, along with the careful organization of your material and the wealth of information presented.

Thank you also for the two turtle pins for our new docents.

Enclosed is a check for your services. We all appreciate your interest in Sea Life Park's Marine Education Program and look forward to your continuted participation in our Workshops.

Mahalo,

Marilyn

Marilyn C. Lee
Education Coordinator

Mary L Pickett

Mary L. Pickett
Education Assistant

MP/mp

Enclosure

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

GEORGE R. ARIYOSHI
GOVERNOR

CHARLES G. CLARK
SUPERINTENDENT

OFFICE OF INSTRUCTIONAL SERVICES
MULTIMEDIA SERVICES BRANCH

STATE OF HAWAII
DEPARTMENT OF EDUCATION
EDUCATIONAL TELEVISION
3157 MANOA ROAD
HONOLULU, HAWAII 96822

September 17, 1981

Mr. George H. Balazs
P. O. Box 1346
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

The program "Hawaii and Planet Earth: The Hawaiian Geography," in the SCIENCE IN HAWAII television series for fourth graders, will be shown on KHET-TV, Channel 11, on the following days and times:

September 29, Tuesday, at 2:00 PM
September 30, Wednesday, at 2:20 PM
October 5, Monday, at 1:00 PM
October 6, Tuesday, at 10:15 AM
October 8, Thursday, at 8:45 AM

This is the program in which your great Dillingham Calendar pictures of the Northwest Islands appear! Sure hope you can catch the broadcast at one of these times. Do tell your family and friends about these dates and times too.

Mahalo for your cooperation and participation. If I can ever be of help, please call me at Educational Television, 988-2117.

Sincerely,

Arlene

Ms. Arlene S. Souza
Producer

ASS:sn

WAIKIKI AQUARIUM

June 15, 1981

George Balazs
Hawaii Institute of Marine Biology
Coconut Island
Kaneohe HI 96744

Dear George,

The sponsors of the Spring '81 Natural History Lecture Series thank you for your participation and cooperation. This year's series was very well received and considerable interest was generated by the variety and quality of presentations. We greatly appreciate your help in increasing public awareness and understanding of Hawaii's natural resources and our dependence on the ocean; this goal can only be achieved by the generous involvement of people such as yourself.

Mahalo nui loa from all the sponsors...and we look forward to working together with you on future educational efforts.

Aloha,

Les Matsuura, Education Coordinator
Waikiki Aquarium

Ray Tabata, Environmental Specialist
U.H. Sea Grant Marine Advisory Program

Art Reed, Secretary
Society of the Sigma Xi

LM:1

SIGMA XI
THE SCIENTIFIC RESEARCH
SOCIETY OF NORTH AMERICA

University of Hawaii at Hilo
SIGMA XI CLUB

P. O. BOX 1357 HILO, HI. 96720

May 19, 1980

Dr. George Balazs
Hawaii Institute of Marine Biology
University of Hawaii at Manoa
P. O. Box 1346
Coconut Island
Kaneohe, HI 96744

Dear George,

On behalf of the Sigma Xi Club at the University of Hawaii at Hilo and the Marine Options Program we would like to thank you for your outstanding presentation on the Leeward Hawaiian Islands. The audience was thrilled by your outstanding photography and came away with a much larger understanding of the geography of the Leeward Islands and the biology of the unique animals that inhabit this area. Your lecture fulfilled the goal of our Science and Society programs, i.e. to make the general public aware of the kind of research that is being done in Hawaii. The audience of nearly 300 demonstrated the large interest in the topic.

Again, our thanks and best wishes in your future studies.

Sincerely,

Don C. Hemmes

Don E. Hemmes, President
Sigma Xi Club
University of Hawaii at Hilo

Walt Dudley

Walt Dudley, Coordinator
Marine Options Program
University of Hawaii at Hilo

DEH:WD:gi

From: Sir Peter Scott CBE DSC

THE NEW GROUNDS
SLIMBRIDGE
GLOUCESTER GL2 7BT

Tele: Cambridge (045-389) 333
Cables: Wildfowl Dursley

6th August 1977

Dear Mr Balazs

International Union for Conservation of Nature & Natural Resources

Survival Service Commission

I am writing to ask if you will be willing to serve the Survival Service Commission of IUCN as a member of the Marine Turtle Specialist Group under the Joint-Chairmanship of Professor Archie Carr, Caribbean Conservation Corporation, Department of Zoology, College of Arts and Sciences, University of Florida, Gainesville, Florida 32601, U.S.A., and Dr Nicholas Mrosovsky, Department of Zoology, University of Toronto, Toronto, Ontario M5S 1A1, Canada, for the 1976/78 triennium.

In common with all Specialist Groups of the Survival Service Commission, group members are asked to advise the Commission, through their Group Chairman, on conservation matters relating to their field of competence and to gather information for the Red Data Books. Most of the work of the Group members will be carried out by correspondence, although it may be necessary to arrange a meeting from time to time.

The Action Programme of the Survival Service Commission is built up on the advice of the Specialist Groups so your role within the Commission's organisation is absolutely vital for the success of IUCN's total conservation programme.

I do hope, therefore, that you will feel able to accept this invitation to work with the Commission.

Yours sincerely

Peter Scott.

Chairman
Survival Service Commission

THE FLORIDA STATE MUSEUM
UNIVERSITY OF FLORIDA

OFFICE OF THE DIRECTOR

the florida
state museum
museum road
university
of florida
gainesville
32611
904/392-1721

25 February 1980

Dr. John Coperon, Director
Hawaii Institute of Marine Biology
Coconut Island, P.O.Box 1346
Kaneohe, Hawaii 96744

Dear Dr. Coperon:

I would like to acknowledge the important contributions that George Balazs of your staff made to the success of the World Conference on Sea Turtle Conservation which was held in Washington, D.C. 26-30 November 1979.

As a member of the Scientific Committee, Mr. Balazs was active in planning the agenda of the Conference and in drawing up the list of more than 70 speakers. With over 350 people in attendance, this was the largest meeting ever convened on sea turtle conservation. At the Conference George gave papers on growth rates of wild sea turtles and the status of turtle populations in the Central Pacific. He also chaired the session on the status of turtle populations in the Southern and Western Pacific. More importantly, he served on a drafting committee that worked throughout the meeting drawing together data from the participants into a "World Strategy for Sea Turtle Conservation". After the Washington Conference Mr. Balazs attended a final meeting of the Scientific Committee here in Gainesville to put the Strategy into its final format. This Strategy is the first comprehensive global program for sea turtle conservation ever produced. The fact that the Conference was sponsored, and partly financed, by the U.S. Fish and Wildlife Service, the U.S. National Marine Fisheries Service, and the U.S. Agency for International Development, and held at the U.S. State Department is indicative of the importance our Federal Government attaches to the Conference and the Strategy. A number of governments, governmental agencies, and private organizations have already pledged to do their part in implementing the Strategy.

The Conference could have been held without Mr. Balazs' participation, but it would not have been as successful, and not nearly as productive. Please accept my personal thanks for his participation.

Sincerely,

F. Wayne King, Ph.D.
Director
and Chairman,
Conference Scientific Committee

s

CABLE ADDRESS :
" SOUTHPACOM " NOUMEA
TELEPHONE : 26.20.00
TELEX : SOPACOM 139 NM

SOUTH PACIFIC COMMISSION
POST BOX D 5
NOUMEA CEDEX
NEW CALEDONIA

ADRESSE TELEGRAPHIQUE :
" SOUTHPACOM " NOUMEA
TELEPHONE : 26.20.00
TELEX : SOPACOM 139 NM

COMMISSION DU PACIFIQUE SUD
BOITE POSTALE D 5
NOUMEA CEDEX
NOUVELLE-CALEDONIE

In reply, please quote CONF 2/9/9/1

PLEASE ADDRESS REPLY TO
THE SECRETARY-GENERAL

27 December 1979

Mr G.H. Balazs
Hawaii Institute of Marine Biology
P.O. Box 1346
KANEOHE,
Hawaii. 96744 USA

Dear Mr. Balazs,

On behalf of the SPC I would like to express our gratitude for your great contribution to the joint SPC/NMFS Workshop on Marine Turtles. Your long experience in the field of marine turtles and the excellent way this was communicated to the Workshop was much appreciated by all participants.

I am sure that as a result of this Workshop there will be a much greater awareness of the importance of marine turtles and the problems of their conservation within our region.

Yours sincerely,

M. Young Vivian
Secretary-General

BERNICE P. BISHOP MUSEUM

P. O. Box 6037, Honolulu, Hawaii 96818 • Telephone 847-3511

November 3, 1978

Mr. George Balazs
Hawaii Institute of Marine Biology
Coconut Island Branch
Kaneohe, HI 96744

Dear Mr. Balazs:

This is to express our warm gratitude and appreciation for your indicated willingness to assist Bishop Museum in the creation of a marine turtle exhibit.

As you know, we hope to be able to open this exhibit to the public sometime around June 1979 in the upper gallery of Polynesian Hall. The exhibit will be on view for some months, and even after it is taken down, our current intention is that it be kept essentially intact to be used again both at the Museum and elsewhere as opportunity arises.

The exhibit will serve a number of educational purposes, making the public aware of the plight of marine turtles, regulations protecting them, and, of course, something of their fascinating natural history.

It was natural for us to turn to you for assistance on this project--in fact, it is hard to imagine our not doing so. Your long record of research on marine turtles, your concern for the protection of these species, and the large amounts of material you have gathered concerning them, all make you a resource person we are most grateful to have working with us.

With cordial regards and aloha,

Sincerely yours,

E. Creutz
Director

cc: Dr. Radovsky

University of Hawaii at Manoa

Department of Zoology
Edmondson Hall • 2538 The Mall
Honolulu, Hawaii 96822

May 11, 1981

George Balazs
HIMB Coconut Island

Dear George,

Once again I would like to thank you for your participation in Marine Biology (Zoology 200) during this spring semester.

Your lecture is an integral component of the course and the students thoroughly enjoyed the account of your research on green turtle reproduction and the conservation of these animals in Hawaiian waters. I understand your slides were excellent, although our room could be blacked out more effectively. I am sorry I did not manage to attend your presentation this year, but hope to next time if you are willing and able to join us next spring.

Sincerely yours,

Julie

Julie H. Brock
Associate Professor

JHB:ly

SEA LIFE PARK

February 18, 1980

George Balazs
Hawaii Institute of Marine Biology
PO Box 1346 #303
Kaneohe, HI 96744

Dear George,

Thank you very much for providing the Spring 1980 volunteer docents with an enlightening lecture on sea turtles. Their response to the presentation was positive and they were glad that you decided to come in spite of the small turn-out this semester.

The sea turtle sighting reports you sent are being circulated--hope you receive some of those back. Also, much thanks for the pins.

Enclosed is a check in the amount of $25.00 for your services and support in the Sea Life Park Education Programs. We look forward to future lectures on marine turtles!

Aloha,
SEA LIFE, INCORPORATED

Marilyn C. Lee
Education Coordinator

Enclosure

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

society for the study of amphibians and reptiles

PUBLISHER OF
THE JOURNAL OF HERPETOLOGY * FACSIMILE REPRINTS IN HERPETOLOGY *
HERPETOLOGICAL REVIEW * THE CATALOGUE OF AMERICAN AMPHIBIANS
AND REPTILES * HERPETOLOGICAL CIRCULARS

Dear Reviewer:

Enclosed is a gratis copy of the "Reproductive biology and diseases of captive reptiles," the first issue in a new SSAR series entitled Contributions to Herpetology. Your assistance in preparing this volume is deeply appreciated. As with some other SSAR publications, we hope to finance this new series with pre-publication sales. Also enclosed are some order blanks for this volume and SSAR membership applications. We hope you will distribute these to interested colleagues, and encourage them to become involved in the SSAR. We are counting on sales from this volume to finance future issues in this new series. With your help we can successfully launch Contributions to Herpetology as a new service to the herpetological community, in keeping with SSAR tradition.

Again, thank you for your help.

Sincerely,

Joseph T. Collins
SSAR Secretary

Encl:
JTC/rk

society for the study of amphibians and reptiles

The Society for the Study of Amphibians and Reptiles is a non-profit, international organization established to advance the study of amphibians and reptiles. Although begun in 1958 as a regional society, the SSAR has rapidly gained a world-wide membership. Today it is recognized as having the most diverse society-sponsored program of services and publications for students of herpetology. Membership is open to all persons interested in learning about amphibians and reptiles.

activities

An annual meeting is held each summer on a university campus or at a biological station in the United States. The Society especially wishes to attract students to its meetings by providing inexpensive and informal facilities. In addition to the papers given by members at these meetings, symposia or other invited speakers are usually planned which allow for detailed discussions of important areas of contemporary study. Workshops for regional society representatives have been organized for the purpose of exploring common problems and sharing new ideas. Live animal, photographic, art, and other exhibits are organized, as well as field trips.

The Society makes a concerted effort to involve a diverse segment of its membership in Committee activities designed to further our knowledge of amphibians and reptiles and manage the affairs of the Society. Committees include: Publications, Nominating, Student Prize, Systematic Resources, Common and Scientific Names, Current Literature, Regional Society Liaison, Conservation, Public Affairs, Editorial, Translations, and Annual Meeting.

publications

SSAR sponsors one of the most diversified series of publications of any scientific society. Each series is described on the reverse of this page. Back issues of most publications are available; a detailed price-list can be obtained simply by checking the appropriate box on the membership application.

membership privileges

All persons with an interest in amphibians and reptiles are welcome to become members of SSAR. Members vote on society matters, attend meetings, and participate in other Society activities. Each year members receive the following publications: Journal of Herpetology (4 issues, totaling about 400 pages), Facsimile Reprints in Herpetology (3-4 issues, about 200 pages), Herpetological Circulars (1-2 issues, about 50 pages), and Herpetological Review (4 issues, about 130 pages).

In addition, SSAR members receive a substantial discount on all book-length facsimile reprints issued during the year. Members may also place standing orders for accounts in the SSAR Catalogue of American Amphibians and Reptiles. Those persons electing the higher membership categories (Sustaining and Contributing members) receive the same publications and services, but provide additional financial support which allows the Society to expand and improve its programs more rapidly than would otherwise be possible.

membership/subscription

Please mark those boxes opposite the items you wish to subscribe to or order, fill in your name and address, and return to:

Dr. Henri C. Seibert
Department of Zoology
Ohio University
Athens, Ohio 45701

Your name and address:

_____

_____

_____

_____ ZIP _____

Make checks payable to "SSAR"; receipt sent on request only.

● INDIVIDUALS:

Student member	$ 12.00 ☐
Regular member	15.00 ☐
Sustaining member	20.00 ☐
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Catalogue of American Amphibians and Reptiles, standing order	6.00 ☐

● INSTITUTIONAL:

Publications set: Journal, Facsimiles (booklet series), Circulars, and Herp Review	25.00 ☐
Catalogue of American Amphibians and Reptiles, standing order	12.00 ☐

TOTAL ENCLOSED $_____

Please check here if you want a list of all SSAR publications available for purchase. ☐

journal of herpetology

The Journal is the Society's official scientific publication. It is international in scope and broadly covers amphibian and reptilian biology. Manuscripts of any length on original research or reviews, whether by members or not, are invited. Most articles are in English and are often extensively illustrated with photographs, drawings and color plates.

herpetological circulars

This series started in 1973 and is intended to serve the broadest spectrum of people with an interest in herpetology. Circulars are sent to all members, and may be purchased by museums, clubs hospitals and governmental agencies. Titles of available Circulars include: A Guide to Preservation Techniques for Amphibians and Reptiles; Guia de Tecnicas de Preservacion de Anfibios y Reptiles; Collections of Preserved Amphibians and Reptiles in the United States; A Brief Outline of Suggested Treatments for Diseases of Captive Reptiles; and, Endangered and Threatened Amphibians and Reptiles in the United States.

herpetological review

Since 1967, Herp Review has been the principal newsletter for the herpetological community. It contains newsnotes about people, institutions, programs and events of interest, including conservation news, book reviews, regional society news, articles on care of captive specimens, and ads.

A primary service of Herp Review is publication of a list of "Current Herpetological Titles" to keep readers abreast of the literature. Titles are obtained from a regular search of hundreds of biological journals by members of the Society.

ssar catalogue of american amphibians and reptiles

The Catalogue is a series of loose-leaf accounts, each giving a wealth of information about a particular genus or species, including common and scientific names, a description, fossil records, a distribution map, and a literature survey. It is an essential reference for all biologists using amphibians and reptiles in research.

To date, over 190 accounts have been issued. Twelve accounts are published each year for $6.00 ($12.00 for institutional subscriptions). This series is not provided as part of the membership; however, standing orders can be made on the SSAR dues form.

facsimile reprints

This series makes available once again important papers and books on amphibians and reptiles; all are exact copies with new introductions, indexes or other features. Members receive the smaller booklets without charge; in the past, authors included were Boulenger, Cope, Eschscholtz, Gray, LeConte, Linnaeus, Tschudi, and Rafinesque.

SSAR also publishes a book-length series; all members receive a special price discount. Titles include: The Bulletin of the Antivenin Institute of America, Camp's Classification of Lizards, Bojanus's Anatome Testudinis, Wiegmann's Herpetolgica Mexicana, Williston's Osteology of Reptiles, Sowerby & Lear's Tortoises, Turtles and Terrapins, Dunn's Salamanders of the Family Plethodontidae, Tschudi's Classification der Batrachier, McIlhaney's The Alligator's Life History, and Holbrook's North American Herpetology.

other publications

Two other series are now discontinued but back issues are still available. Both were published by SSAR's predecessor, The Ohio Herpetological Society. In spite of the Society's geographically-associated name, the scope of these series (Journal, Special Publications) is international in character; all publications are illustrated.

AVAILABLE NOW

A New Book of Major Importance to

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About 350 pages, 7 x 10 inches, 32 figures, 56 photographs, 30 tables, index.
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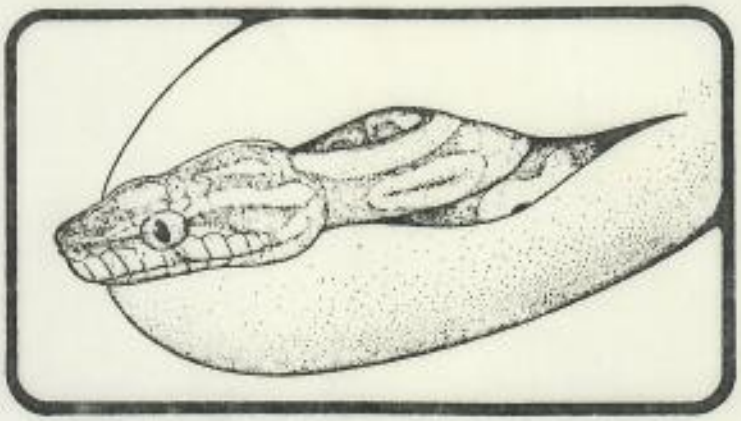

CONTENTS

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To SSAR members, *if ordered before 1 August 1980* . . . . . ☐ $10 paperbound* ☐ $14 clothbound

To non-members; Institutions; all orders after 1 August . ☐ $20 paperbound* ☐ $24 clothbound

**Persons wishing to change orders to clothbound copies can remit an additional payment of $4.*

Prices include packing and shipping world-wide. Address orders to Dr. Henri C. Seibert, Department of Zoology, Ohio University, Athens, Ohio 45701, U.S.A. Receipt sent on request only. Mark here ☐ if you wish to have a complete pricelist of SSAR publications including the *Journal of Herpetology, Facsimile Reprints in Herpetology, Herpetological Review, Herpetological Circulars, Catalogue of American Amphibians and Reptiles*, and the publications of The Ohio Herpetological Society.

SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES

JUL 27 '81

cc - Balazs
D. Banner

University of Hawaii at Manoa

Graduate Division and Research Administration

MEMORANDUM

July 24, 1981

TO: Dr. Philip Helfrich
Director, HIMB

FROM: B. Z. Siegel
Interim Director of Research

SUBJECT: Items from the Board of Regents' Meeting of July 23, 1981

The following appointments and changes in appointments were approved at the subject meeting.

LEAVES OF ABSENCE WITH PAY

BALAZS, George H., Assistant Marine Biologist, Hawaii Institute of Marine Biology, extension of IPA Agreement with pay from June 1, 1981 through May 31, 1982 (following a leave period from June 1, 1980 through May 31, 1981, approved by the Board on July 10, 1980). COMMERCE, NOAA NMFS, SWFC Honolulu Laboratory will reimburse University of Hawaii for salary and fringe benefit costs.

LEAVES OF ABSENCE WITHOUT PAY

BANNER, Dora M., Assistant Marine Biologist, Hawaii Institute of Marine Biology, July 1, 1981 through January 3, 1982: depletion of funds.

July 2, 1981

(DATE)

TO: George H. Balazs

FROM: Philip Helfrich

SUBJECT: Forfeiture of Accumulated Vacation and/or Sick Leave

In accordance with the policy adopted by the Board of Regents on October 20, 1966, concerning Employment of Personnel Under Research Grants and Contracts, you will forfeit the following hours of accumulated vacation and/or sick leave due to your termination or transfer from the research grant/contract listed below:

RESEARCH GRANT/CONTRACT TITLE: Survey and assessment of green sea turtles

ACCOUNT NUMBER: 22-T-902-F-922-B068

STARTING DATE OF EMPLOYMENT ON THIS GRANT/CONTRACT: 06-01-79

TERMINATION DATE OF EMPLOYMENT ON THIS GRANT/CONTRACT:

VACATION HOURS FORFEITED: 138

SICK LEAVE HOURS FORFEITED:

P. Helfrich

(SIGNATURE OF PRINCIPAL INVESTIGATOR, DIRECTOR, CHAIRMAN, etc.)

Prepare in three copies. (Original to employee, 1st copy to Personnel Office, 2nd copy for department file.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Denver Wildlife Research Center
Tulane University Museum of Natural History
Belle Chasse, Louisiana 70037

27 February 1981

Dr. George Balazs
National Marine Fisheries Service
S.W. Fisheries Center
Honolulu Laboratory
Honolulu, Hawaii 96812

Dear George:

I have been working on a bibliography of a marine turtles with Margie Stinson for several years. We are trying to index and anotate as many references as possible to increase the value of the bibliography to other people.

Unfortunately, I have only a few of your papers. I would like to request copies of any papers and reports that might be available. In particular those published in Elepaio are of interest. I would also appreciate a copy of the Synopsis of Biological Data on the Green Turtle in the Hawaiian Islands, NOAA-TM-NMFS-SWFC-7. This is an important compilation which should be a stimulus for much thought with reference to other populations.

Sincerely,

Tom

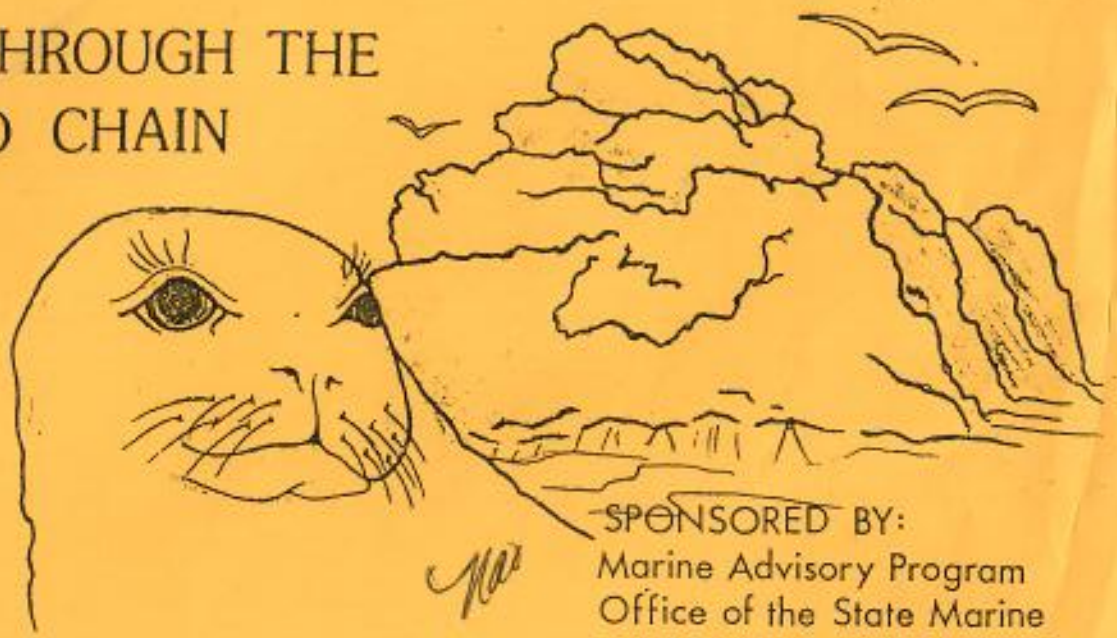
Thomas H. Fritts

THF:jr

HAWAII'S HIDDEN ISLANDS:

JOURNEY THROUGH THE NORTHWESTERN HAWAIIAN ISLANDS

A PHOTOGRAPHIC VOYAGE THROUGH THE LEEWARD CHAIN



PRESENTED BY:

GEORGE H. BALAZS

MARCH 3, 1981
uhh campus ctr 306-307
7:30 PM

SPONSORED BY:
Marine Advisory Program
Office of the State Marine
Affairs Coordinator

George - I Hope date & time will fit your schedule
Thanks Jake

Marine Biology - Zoo 209
Tentative schedule

	Lectures (Edm 355, 10:30-11:20)	Week	Labs. (Edm. 361, 11:30-4:20)
Jan 24	Introduction - Marine Environment	1	No Labs.
29	Reef Invertebrates I	2	Introductory remarks, Plate tectonics movie, and introd. to reef invertebrates
31	Reef Invertebrates II		
Feb 5	Physical aspects-tides, currents, etc (Dr. R. Stroup)	3	Field Trip to H.I.M.B.
7	Algae		Kaneohe
12	Phytoplankton and Productivity	4	Plankton
14	Zooplankton		
19	Intertidal I	5	Seaweeds, identification and preseed samples
21	Intertidal II		
26	Mid Term I	6	Estuarine fauna, coral communities
28	Hawaiian estuaries and ponds.		
Mar 4	Soft sediment communities	7	Corals and Mangrove biota
6	Coral Reefs I (Dr. R. Kinzie)		
11	Coral Reefs II	8	Field Trip to Hanauma Bay, or Kewalo
13	Coral Reef Ecology		
18	Fish I (Dr. R. Brock)	9	Ichthyology-dissections and fish mouth parts
20	Fish II (Dr. R. Brock)		
Mar 24-29	Spring Recess		
Apr 1	Deep Sea	10	Deep Sea fauna and sampling methods
3	Mid Term II		
8	Marine birds (Dr. A.J. Berger)	11	Field Trip to the Aquarium
10	Turtles (George Balazs)		
15	Mammals	12	Kaneohe Bay movie
17	Pollution I (Dr. S.V. Smith)		
22	Pollution II	13	Mullet Movie and Hawaiian aquaculture animals
24	Fisheries		
29	Aquaculture	14	Visit to an aquaculture facility.
May 1	Aquaculture		
6	Utilization of Marine Resources (Dr. J. Yerdach)	15	Lab exam.
8	Review		" "
May 13	Final exam 9:45-11:45 am		

University of Hawaii at Manoa

Department of Zoology
Edmondson Hall • 2538 The Mall
Honolulu, Hawaii 96822

April 15, 1980

Mr. George Balazs
Research Associate
HIMB

Dear George,

Many thanks for your guest lecture to the Zoo. 200, Marine Biology students. Once again you gave a very informative and beautifully illustrated discussion on sea turtles, their basic biology, and the reproductive history of our local green turtle population.

I really appreciate the time and expertise that you have given to the course and hope you will be able to join us next time the course is offered.

Best regards,

Julie

Julie H. Brock

JHB:ly

From : Sir Peter Scott CBE DSC

THE NEW GROUNDS
SLIMBRIDGE
GLOUCESTER GL2 7BT

Tele : Cambridge (045-389) 333
Cables : Wildfowl Dursley

9 May 1979

Dear Dr. Balazs,

Survival Service Commission

As agreed at the last meeting of the Survival Service Commission, I am writing to ask if you will be willing to serve as Deputy Chairman of the Marine Turtle Specialist Group, with Professor Archie Carr as your Chairman, for the 1979/81 triennium.

Over the past several years, it has been heartening to see how governments and decision-makers have become more aware of the need to conserve Endangered Species. Increasing numbers of National Red Data Lists, laws which protect species on those lists, and international agreements through which nations can cooperate in conserving Endangered Species, have come into existence. The SSC - particularly our Specialist Groups - can take pride in having recognized the need and provided the stimulus for much of this action.

Together with this official recognition of the necessity for slowing the still inexcusable rate of extinction comes a corresponding need for an effective network able rapidly to recognize opportunities of enhancing the status of Endangered Species or to provide accurate, current information concerning problems that may threaten a species. This is particularly true for our Commission, as governments and organizations such as the Secretariat to the Convention on International Trade in Endangered Species of Wild Fauna and Flora turn even more frequently to us for advice on matters relating to the status of species.

We have plans to improve our system of monitoring the status of species and their habitats and view the role of the Specialist Groups as vital to our success. It has been our experience that the effectivenss of a Specialist Group is related directly to the knowledge, competence and enthusiasm of the Group Chairman. You have been such a person and I hope you will be able to continue assisting us in what we consider a most vital and rewarding effort. I am enclosing some material that explains the revised organization, functions and relationships of the various elements of the SSC in more detail and shall be looking forward to learning your decision. I greatly hope it will be affirmative.

Yours sincerely,

Peter Scott.

Chairman

WAIKIKI AQUARIUM

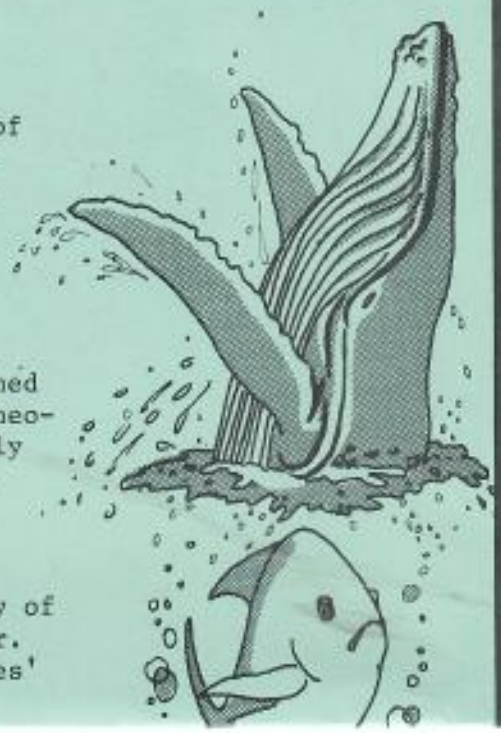
Natural History Lecture Series

THE PALAU ISLANDS AND THE CHAMBERED NAUTILUS - FEBRUARY 13,
Speakers: Gordon Damon and Jacki Kilbride

Gordon and Jacki are highly experienced and well-traveled scuba divers. Together they operate "Deep Dimensions," an underwater photography and tour escort business. They recently accompanied and photographed an Aquarium Nautilus expedition to Palau.

HAWAIIAN MONK SEALS - FEBRUARY 27,
Speakers: Brian and Patti Johnson

Brian and Patti are graduate students at the University of Hawaii studying the behavior of Hawaii's endangered monk seals. They have spent many months living in the Northwestern Hawaiian Islands among these fascinating marine mammals.



PADDLING MY OWN CANOE - MARCH 13,
Speaker: Audrey Sutherland

Audrey, author of Paddling My Own Canoe, is an accomplished outdoorswoman. She will discuss how the natural and archeological history of the islands can be explored in normally inaccessible places with a minimal environmental impact.

HUMPBACK WHALES IN THE HAWAIIAN BREEDING WATERS - MARCH 27,
Speaker: Dr. Lou Herman

Dr. Herman is a professor of psychology at the University of Hawaii and a researcher in the field of cetacean behavior. He has made extensive field studies of the humpback whales' annual visit to Hawaiian waters.

THE NORTHWESTERN HAWAIIAN ISLANDS - APRIL 10,
Speaker: George Balazs

George is well-known in Hawaii for his work on the ecology and conservation of marine turtles. He has visited the Northwestern Hawaiian Islands many times observing and photographing the animals living there. His photographs appear on this year's Dillingham Tide Calendar.

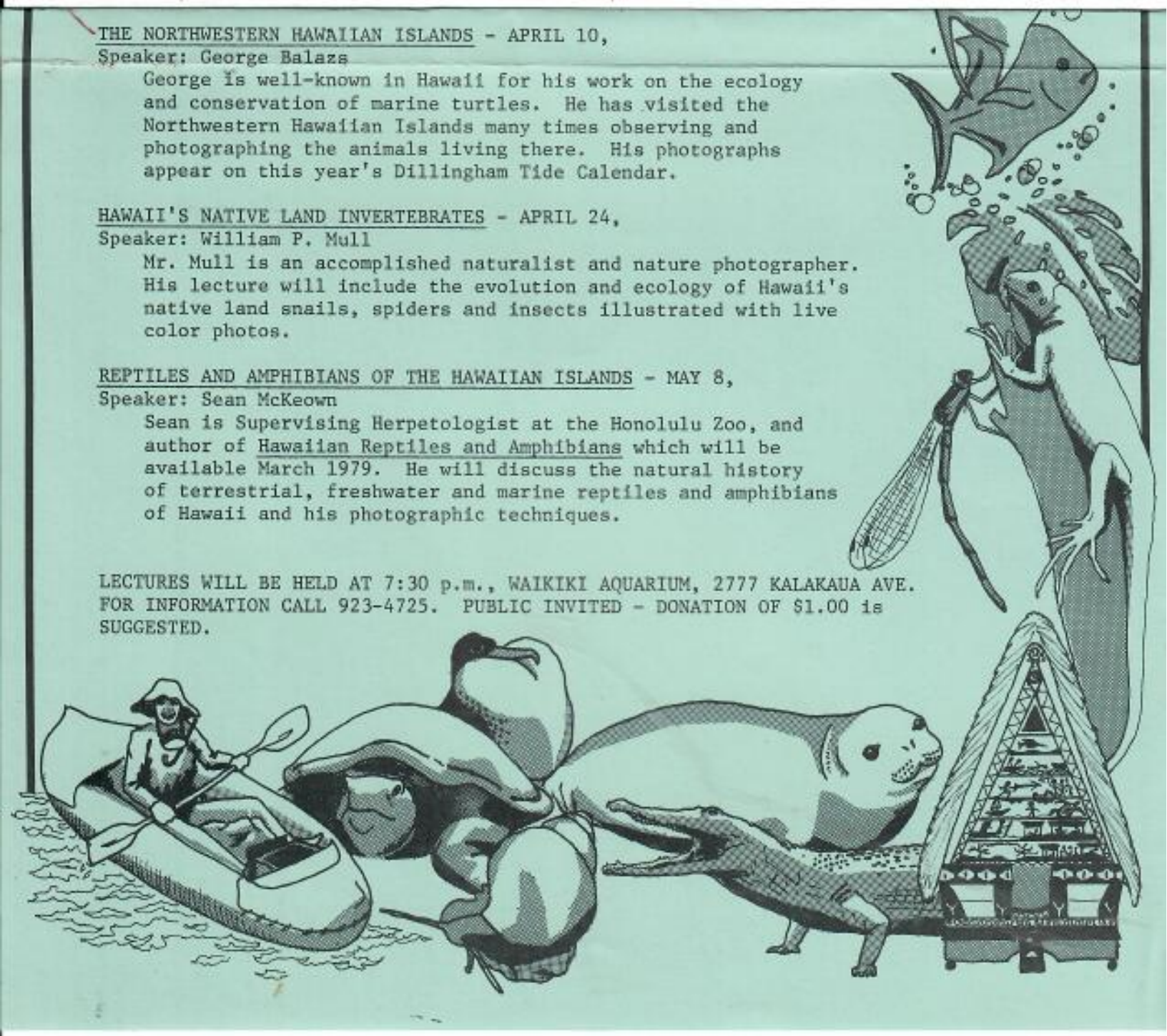
HAWAII'S NATIVE LAND INVERTEBRATES - APRIL 24,
Speaker: William P. Mull

Mr. Mull is an accomplished naturalist and nature photographer. His lecture will include the evolution and ecology of Hawaii's native land snails, spiders and insects illustrated with live color photos.

REPTILES AND AMPHIBIANS OF THE HAWAIIAN ISLANDS - MAY 8,
Speaker: Sean McKeown

Sean is Supervising Herpetologist at the Honolulu Zoo, and author of Hawaiian Reptiles and Amphibians which will be available March 1979. He will discuss the natural history of terrestrial, freshwater and marine reptiles and amphibians of Hawaii and his photographic techniques.

LECTURES WILL BE HELD AT 7:30 p.m., WAIKIKI AQUARIUM, 2777 KALAKAUA AVE. FOR INFORMATION CALL 923-4725. PUBLIC INVITED - DONATION OF $1.00 is SUGGESTED.



University of Hawaii at Manoa

Department of Zoology
Edmondson Hall • 2538 The Mall
Honolulu, Hawaii 96822

April 20, 1979

Mr. George H. Balazs
Assistant Marine Biologist
HIMB

Dear Mr. Balazs:

I would like to convey my sincere thanks to you for the lecture you gave to the Marine Biology class (Zoo. 200).

The students enjoyed meeting you and hearing about your research. They have grasped many of the basic concepts that are applied to the marine environment and are now more aware of the wealth of information that is broadly categorized under the heading of Marine Biology. I am always impressed by their response to guest lecturers and research-oriented topics and feel that this type of exposure is most valuable to undergraduate students at an early stage in their university education.

Sincerely yours,

Julie

Julie H. Brock
Associate Professor

JHB:ly

SEA LIFE PARK

September 13, 1979

George Balazs
Coconut Island
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, Hawaii 96744

Dear George,

Once again, thank you for your participation as a lecturer in Sea Life Park's Volunteer Docent Training and Instructional Workshop! The volunteers enjoyed learning about sea turtles through your excellent slide and lecture presentation.

Everything has been moving along. Soon, students and teachers will be visiting the park and participating in our education programs! My work towards obtaining college credit for the workshop is slow, however. Resumes and syllabuses are still not complete. Hopefully and eventually, course credit will be available for those volunteers interested.

The Spring 1980 workshop will begin sometime in January. I hope that you will continue to be a part of our program. We certainly appreciate your support and consideration in promoting Sea Life Park's Volunteer Docent Program.

Mahalo and Aloha,
SEA LIFE, INCORPORATED

Marilyn

Marilyn C. Lee
Education Coordinator

ML/mh

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

SEA LIFE PARK

April 11, 1979

George Balazs
Coccnut Island
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, Hawaii 96744

Dear George,

Thank you very much for participating as a lecturer in Sea Life Park's Volunteer Docent Program. Your information and slides concerning sea turtles was well presented! I am sure the volunteer docents appreciated your special interest in and concern about sea turtles. Also, the volunteers enjoyed the informal question and answer period.

The green sea turtle skull, which was prepared by you and your assistant, will definitely add interest to the "Turtles of Hawaii" learning station for our 5th grade students.

Enclosed is an application for our Sea Life Park annual pass. This pass will allow you and your immediate family to come to the park at any time--as guests of the park. Present the application to the Gatehouse when you visit the park. This is in appreciation for your time and efforts spent with me as well as at our workshop on sea turtles. I hope that I can count on you once again the next workshop session (July or August)!

Thanks again, George, for your support and consideration in promoting Sea Life Park's Volunteer Docent Program.

Aloha,
SEA LIFE, INCORPORATED

Marilyn C. Lee
Education Coordinator

Enclosure
ML/mh

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

DEPARTMENT OF DEFENSE
DEPENDENTS SCHOOLS
GEORGE CANNON SCHOOL
FPO SAN FRANCISCO 96614

PACIFIC

8 June 1977

Dr. John Bardach, Director
Hawaii Institute of Marine Biology
P. O. Box 1346
Kaneohe, Hawaii 96744

Dear Dr. Bardach:

This is in recognition of the outstanding workshops and conferences conducted by George H. Balazs during his recent stay on Midway Island.

On Friday, 27 May, an assembly was held for grades 5-12; that afternoon we had a faculty in-service on Eastern Island. On Tuesday, 31 May, two sessions were held with primary children. All of these events were extremely effective. George's professionalism and ability to adjust to wide differences in ages and backgrounds was remarkable. It was truly a fine educational experience for all concerned.

If there is any way that any of us can be of assistance to you or to George, don't hesitate to call on us.

Sincerely,

KENNETH F. RHEA, Ph.D.
Principal

KR:bs

cc: George Balazs

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Duval Building
9450 Koger Boulevard
St. Petersburg, FL 33702

November 27, 1978

Dr. George Balzs
Hawaii Institute of Marine Biology
Box 1346
Coconut Is., Kaneohe, HI 96744

Dear Dr. Balzs:

We are pleased to announce your selection as an official consultant for the Southeast Region's Marine Turtle Recovery Team.

As outlined previously, the Team is charged with the formulation of a biological recovery plan for the marine turtles in the Southeast Region. This plan should be completed in final form by December 1, 1979, and at that time the recovery team will have completed its mission.

Mr. Ken Chitwood, FWS, and Dr. Joseph R. Sylvester, NMFS, will coordinate and assist you in formulating the recovery plan. Thank you for your interest.

Sincerely yours,

William H. Stevenson

William H. Stevenson
Regional Director

BERNICE P. BISHOP MUSEUM

P. O. Box 6037, Honolulu, Hawaii 96818 • Telephone 847-3511

November 3, 1978

Mr. George Balazs
Hawaii Institute of Marine Biology
Coconut Island Branch
Kaneohe, HI 96744

Dear Mr. Balazs:

This is to express our warm gratitude and appreciation for your indicated willingness to assist Bishop Museum in the creation of a marine turtle exhibit.

As you know, we hope to be able to open this exhibit to the public sometime around June 1979 in the upper gallery of Polynesian Hall. The exhibit will be on view for some months, and even after it is taken down, our current intention is that it be kept essentially intact to be used again both at the Museum and elsewhere as opportunity arises.

The exhibit will serve a number of educational purposes, making the public aware of the plight of marine turtles, regulations protecting them, and, of course, something of their fascinating natural history.

It was natural for us to turn to you for assistance on this project--in fact, it is hard to imagine our not doing so. Your long record of research on marine turtles, your concern for the protection of these species, and the large amounts of material you have gathered concerning them, all make you a resource person we are most grateful to have working with us.

With cordial regards and aloha,

Sincerely yours,

E. Creutz
Director

cc: Dr. Radovsky

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

MARINE MAMMAL DIVISION, NWAFC
BLDG. 32
7600 SAND POINT WAY N. E.
SEATTLE, WASHINGTON 98115

March 30, 1978

Dr. G. Causey Whittow
University of Hawaii
Pacific Biomedical Cinter
Kewalo Marine Laboratory
41 Ahui Street
Honolulu, Hawaii 96813

Dear Causey:

I have seen our library copy of the Hawaiian Monk Seal bibliography that you and George prepared. It is an important document which will be invaluable to marine mammalogists and particulary those working with the monk seal.

Bob DeLong and I had the opportunity to examine a copy of Morrell recently and have noted and compiled references to marine mammals from the book. You may have prepared something similar for your own information but in case you haven't a copy of our notes are enclosed. The citation of this work appears to be incomplete in the bibliography perhaps through typographical error. I will send George a copy of our excerpts for his file also.

If you still have copies of the bibliography available I would very much appreciate one for my personnal file.

Sincerely;

Clifford H. Fiscus
Wildlife Biologist

Enclosure

April 5, 1978

Dr. Clifford H. Fiscus
Wildlife Biologist
Marine Mammal Division
National Marine Fisheries Service
Building 32
7600 Sand Point Way N.E.
Seattle, WA 98115

Dear Cliff:

Thank you for your kind remarks about our bibliography. Most of the credit for it should go to George who instigated the project and did most of the work. I appreciate your Xerox copies from Morrell; thank you for correcting the reference. Enclosed is a copy of the bibliography.

Sincerely,

G. Causey Whittow
Professor of Physiology

Enclosure

WAIKIKI AQUARIUM

January 23, 1979

Mr. George H. Balazs
Hawaii Institute of Marine Biology
Coconut Island - Kaneohe
c/o Zoology Department
University of Hawaii, Manoa
Edmondson Hall #152
2538 The Mall
Honolulu, Hawaii 96822

Dear Mr. Balazs,

Thank you for agreeing to participate in the Waikiki Aquarium's Natural History Lecture Series. We feel we've put together a really exciting group of speakers! Your lecture will be on April 10, 1979. Lectures will begin at 7:30 p.m. and should be planned to last between fifty (50) and seventy (70) minutes. Lectures will be held in the foyer of the Aquarium and a Kodak carousel slide projector and screen will be provided. If you need other equipment please let me know (e.g. blackboard, movie projector, etc.). This lecture series will be advertised to the general public and should be appropriate in content and delivery for a lay audience.

We appreciate your support of the Aquarium's educational program and as a token of our appreciation, will be presenting you with a $25.00 gift certificate redeemable in the Aquarium's Natural Selection Shop.

If you have any questions, please call me.

Sincerely,

Ann

(Mrs.) Ann H. Fielding
Education Specialist
Education Section

AHF:aw

Enclosure - Natural History Lecture Series flyer

U.S. FISH AND WILDLIFE SERVICE
OFFICE OF ENDANGERED SPECIES
WASHINGTON, D.C. 20240

September 8, 1978

Dear George:

Thank you for your letter of 26 August; I would indeed like to have a copy of the Monk seal and green turtle on the beach for use in the Endangered Species Technical Bulletin when the proposal for green turtle Critical Habitat is published in the Federal Register. If possible, it would also be nice to have a photo of just the turtle basking by itself. Of course, you would be given credit for the photo; we could also have duplicates made and b and w's should you need any extra copies.

The proposal for green sea turtle Critical Habitat is now circulating for in-house review. It includes nearly all of French Frigate Shoals, Lisianski, Laysan, Pearl and Hermes Reef, and Necker Island as well as areas in Amer. Samoa (Rose Atoll), Pacific Trust Territory, and Florida. You will be officially notified when the proposal appears (hopefully in the next couple of weeks). In addition, I believe Ron Nowak of our staff is working of Critical Habitat for the monk seal.

Thank you for your help with the photos and your long standing committment to the survival of the sea turtles in the Pacific.

Sincerely

Ken Dodd

AGREEMENT

In consideration of George H. Balazs (hereinafter referred to as Grievant) withdrawing the Step 2 grievance filed by him on July 5, 1977 and accepting the following terms as final resolution of said grievance, the Chancellor agrees to reconsider the Grievant's application for promotion according to the following:

1. The Grievant shall have until September 16, 1977 to submit additional materials pertaining to his application for promotion, which will be appended to his application.
2. The Chancellor will refer the application to the Dean of the Graduate Division for his advice on the specific issue of whether or not the Grievant has training equivalent to one year of graduate work beyond the master's degree. The Dean of the Graduate Division shall be free to meet with Grievant and the Chancellor or his designee as he deems necessary. He shall act with discretion and due consideration for the confidentiality of the matter involved.
3. At the conclusion of the reconsideration process, the Chancellor will notify the Grievant of his decision whether or not to recommend promotion. If he decides not to recommend promotion, and the Grievant so requests, he will provide the grievant with a statement of reasons for the decision.

Douglas S. Yamamura, 9/19/77
Douglas S. Yamamura — Date
Chancellor

George H. Balazs, 9/16/77
George H. Balazs — Date

Additional Information and Materials Relating to the
Promotion Application of George H. Balazs

submitted 16 September 1977 in concordance
with the attached agreement between Chancellor
Douglas S. Yamamura and George H. Balazs

1. Between 21 February and 12 March 1977 an honorary consultancy assignment involving visits to Fiji and the Cook Islands was carried out at the request of the South Pacific Commission. A 54 page advisory report entitled South Pacific Commission Turtle Project: A Constructive Review and Evaluation with Recommendations for Future Action was prepared (see attached letter from Dr. Frank Mahony dated 8 July 1977).

2. In April 1977 a major article was reviewed for the highly respected scientific journal HERPETOLOGICA

3. In May 1977 four lectures on marine turtles and marine biological research were presented to the staff and students of George Cannon School, Midway Islands (see attached letter from Dr. Kenneth F. Rhea dated 8 June 1977).

4. In collaboration with Dr. G. C. Whittow of the Physiology Department, in June 1977 a $3,660 grant was received from the National Geographic Society to study the thermal ecology of basking Hawaiian green sea turtles.

5. In August 1977 a $20,000 year one grant was received from the Office of Sea Grant to undertake a two year survey and assessment of the green sea turtle resource of the Northwestern Hawaiian Archipelago.

6. In August 1977 I was appointed to the Marine Turtle Specialist Group of the International Union for the Conservation of Nature and Natural Resources (IUCN).

Summary Statement:

The knowledge and skills needed to successfully achieve the endeavors listed in this promotion application were acquired through independent study as well as training while working with colleagues. I believe that this has represented well in excess of the minimum qualification of "training equivalent to one year of graduate work beyond the master's degree."

University of Hawaii at Manoa

Office of the Chancellor
Hawaii Hall 105 • 2500 Campus Road

November 21, 1977

MEMORANDUM

To: George H. Balazs
Hawaii Institute of Marine Biology

From: Peter N. Dobson, Jr.
Assistant Vice Chancellor for Faculty Affairs

Subject: Promotion to Assistant Marine Biologist

I am pleased to inform you that the Board of Regents, at its meeting of November 17, 1977, approved your promotion to Assistant Marine Biologist effective July 1, 1977. The promotion carries with it an additional incremental step, so that your rank and salary designation as of July 1, 1977 will be R3-4Z with monthly salary of $1,425. Copies of this memorandum are being sent to the Office of Research Administration and the Director of HIMB so that a form 5B can be prepared to effect the promotion and salary change. The retroactive portion of the salary increase will be included with your first check after the 5B is processed.

Thank you for your patience and cooperation during this period of reconsideration.

cc: Howard P. McKaughan, Dean
William Coops, Interim Director, HIMB
Solomon Loo, UHPA
Faculty Records Office

University of Hawaii at Manoa

Office of the Chancellor
Hawaii Hall 105 • 2500 Campus Road

November 1, 1977

MEMORANDUM

To: George H. Balazs
Hawaii Institute of Marine Biology

From: Peter N. Dobson, Jr.
Assistant Vice Chancellor for Faculty Affairs

Subject: Promotion reconsideration

The President's recommendation for promotion to Assistant Marine Biologist, retroactive to July 1, 1977, is on the agenda for discussion with the BOR Personnel Relations Committee. If they approve, as expected, the Board will take formal action at its November meeting. I will notify you as soon as this action is completed.

University of Hawaii at Manoa

Manoa Faculty Senate Executive Committee
Honolulu, Hawaii 96822

9 February 1978

Mr. George H. Balazs
Jr. Marine Biologist
Hawaii Institute of
Marine Biology
Coconut Island, Kaneohe
Hawaii 96744

Dear Mr. Balazs:

We have been informed by Professor Marcia Wood, a holdover Senator, that she is unable to attend the meetings of the Manoa Faculty Senate, and therefore she ought to be replaced. Her term ends on June 30, 1978.

This informs you that as an alternate you will replace her seat on the Senate for the remainder of her term, and that your term begins immediately. Congratulations and best wishes to you as you go about your senatorial assignments.

MANOA SENATE EXECUTIVE COMMITTEE

B. Z. Siegel per nt

B. Z. Siegel, Chairman

BZS
nt

cc: Marica Wood, Coordinator
Office of CBA Student Academic Services

University of Hawaii at Manoa

Office of the Chancellor
Hawaii Hall 105 • 2500 Campus Road

November 21, 1977

MEMORANDUM

To: George H. Balazs
Hawaii Institute of Marine Biology

From: Peter N. Dobson, Jr.
Assistant Vice Chancellor for Faculty Affairs

Subject: Promotion to Assistant Marine Biologist

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Thank you for your patience and cooperation during this period of reconsideration.

cc: Howard P. McKaughan, Dean
William Coops, Interim Director, HIMB
Solomon Loo, UHPA
Faculty Records Office

Dillingham

December 14, 1978

Mr. George Balaz
Assistant Marine Biologist
University of Hawaii
P. O. Box 1346
Kaneohe, HI 96744

Dear George:

Now that the tide calendar is out, I concur with others whose opinions I appreciate, that it is one of the most attractive we have ever produced. I'm sure that it gives you pleasure to see your photographs get the type of distribution that they deserve. It's been a pleasure working with you and I wish you the best of luck in your future endeavors.

Sincerely,

W. H. Stryker
Director
Public Relations

WHS:lw

BOX 3468 HONOLULU HAWAII 96801 CABLE: DILCORP TELEPHONE (808) 946-0771

SEP 28 '81 AM

RECD HIMB

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

September 24, 1981 F/SWC2:RSS

Dr. Philip Helfrich
Director, Hawaii Institute
of Marine Biology
P. O. Box 1346
Kaneohe, HI 96744

Dear Phil,

This is to confirm our discussion on the proposed trip by George Balazs to survey the turtle resources of the Tokelau Islands. I believe it would be to the best interest of the University of Hawaii and the Federal Government if George did take advantage of this unique opportunity to obtain data on the turtle resources of the area. I'm glad that you fully agree with me on this point.

In discussing details of the Tokelau trip with George, he indicated that he would like to spend several days in Western Samoa in order to follow up on a study he is undertaking with researchers from Western Samoa on the hawksbill headstart project. The National Marine Fisheries Service is keenly interested in the hawksbill population in Western Samoa since we believe that the hawksbill showing up in American Samoa probably comes from one single intermingling population. Since the per diem costs to cover George's stay in Western Samoa will not run more than several hundred dollars we would be willing to cover the cost of this portion of George's trip. I would like to suggest that you send us a bill after George's return from this trip to cover the Western Samoa portion.

Sincerely,

Richard S. Shomura
Director, Honolulu Laboratory

cc: G. Balazs

BY AGREEMENT (ABOVE) U. H. WILL COVER SOME OF MR. BALAZS EXPENSES AND WILL BE REIMBURSED BY "NMFS". HOUSING WAS PROVIDED BY PRIVATE RESIDENCE AND TRAVELER FURNISHED FOOD IN THE AMOUNT OF $45.00.

SEA LIFE PARK

November 6, L982

Mr. George Balazs
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, HI 96744

Dear George,

Thank you once again for another of your superb lectures on marine turtles for the Fall 1982 Volunteer Docent Training Workshop. As always, everyone enjoyed the enthusiasm you bring to your topic and the careful organization of a great deal of information.

The workshop is the core of Sea Life Park's education program, enabling us to consistently train knowlegeable and responsible new volunteers. This year's group of twenty brings our total of volunteers to forty-seven, allowing us to expand our programs to include grade levels one though three, and high school. Your role in this work is very important to us.

Enclosed is an honorarium check. We all appreciate your interest in Sea Life Park's Marine Education Program and look forward to your continued participation in our workshops.

Mahalo nui loa,

Marilyn C. Lee
Education Coordinator

Mary Pickett
Mary L. Pickett
Education Associate

Enclosure

P.S. If you are in need of an up-dated Annual Pass Holder Card, kindly send us your old card(s) and we will mail them back to you.

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

MARINE BIOLOGY - Zoology 200 1983

TENTATIVE SCHEDULE

Lectures: 10:30-11:20 (Edm. 355)		Week	Labs: 1:30-4:20 (Edm. 361)
Jan. 18	Introd. Marine Environment	1	Introductory remarks; seaweeds
20	Algae		
25	Zooplankton	2	Plankton
27	Phytoplankton & productivity		
Feb. 1	Ocean currents (Dr. E. Stroup)	3	Field Trip - Kewalo
3	Reef Invertebrates I		
8	Reef Invertebrates II	4	Reef Invertebrates, settlement plates
10	Intertidal I		
15	Intertidal II	5	Field Trip Niu Valley beach
17	Soft sediment communities		
22	Mid Term I	6	Deep sea movie, TV tapes
24	Deep sea (Dr. D. Karl)		
Mar. 1	Coral reefs I (Dr. R. Kinzie)	7	Corals, morphology and ident.
3	Coral reefs II		
8	Coral reef ecology	8	Field Trip - Coconut Island
10	Fish I (Dr. R. Brock)		
15	Fish II (Dr. R. Brock)	9	Ichthyology lab
17	Estuaries, Hawaiian ponds		
	March 21 - 26 Spring Recess		
29	Mid Term II	10	Birds, turtles, mammals (turtle movie)
31	Marine birds, reptiles		
Apr. 5	Turtles (George Balazs)	11	Field Trip - Aquarium & reef
7	Marine mammals		
12	Pollution I	12	Pollution/Aquaculture demo. Kaneohe Bay movie.
14	Pollution II		
19	Fisheries management (Dr. R. Brock)	13	Oceanic Institute, aquaculture research labs.
21	Aquaculture I		
26	Aquaculture II	14	Lab exam and course evals.
28	Utilization of marine resources (Dr. J. Bardach)		Lab exam and course evals.
May 3	Review		

FINAL EXAM - May 10 9:45-11:45

MISCELLANEOUS

PUBLIC AFFAIRS

La Jolla Laboratory

On November 16, Mr. John Carr, Deputy Director, presented an overview of research activities at the Southwest Fisheries Center to participants of the Pacific Marine Fisheries Commission's annual meeting in Monterey, CA. Areas of special interest highlighted in the talk dealt with the Fisheries Information Network (FIN), coastal marine mammals, striped bass, and research aspects of work on albacore, groundfish, and anchovy.

Mr. Carr also made a presentation on November 29 to representatives of USC Sea Grant; the meeting was held at Terminal Island, CA. Mr. Carr spoke on research projects of potential interest to USC in carrying out its Sea Grant mission.

Tiburon Laboratory

On November 19, fishery biologist Mickey Eldridge gave a 3-hour talk and laboratory session on marine fishes and their environments to students of Petaluma Elementary School.

On November 19, industry economnist Ed Ueber represented NMFS in a seminar at San Francisco State University. The seminar, sponsored by the Biology Department, addressed job opportunities in the fisheries field. Approximately 50 students attended.

SEMINARS

Honolulu Laboratory

November 10 - Dr. Noel C. Gillespie, Director, Fisheries Research Branch, Department of Primary Industries, Queensland, Australia, spoke on the ongoing research at his laboratory.

12 - George H. Balazs, Fishery Biologist, spoke on "Some biological and historical aspects of sea turtles at Rose Atoll and the Manua Group of American Samoa."

HONOLULU
LA JOLLA
MONTEREY
TIBURON

SOUTHWEST FISHERIES CENTER

MONTHLY REPORT - NOVEMBER 1982

TABLE OF CONTENTS AND RESEARCH HIGHLIGHTS

NOAA/NMFS

University of Hawaii at Manoa

Department of Zoology
Edmondson Hall • 2538 The Mall
Honolulu, Hawaii 96822

May 6, 1983

Mr. George Balazs
NMFS
Dole Street

Dear George:

I would like to take this opportunity to thank you on behalf of my Marine Biology students for your presentation in the course (Zool. 200) this semester. They thoroughly enjoyed your beautifully illustrated lecture and benefited from the turtle fact sheet. Thank you for bringing a xerox by so we could run off copies for this class and future sessions.

I hope research progresses well and that you can join us again next year.

Sincerely yours,

Julie H. Brock

Julie H. Brock

JHB:ly

FORM CD-97 (5-77) DAO 204-1

U.S. DEPARTMENT OF COMMERCE

REQUEST FOR SECURITY ASSURANCE AND OFFICIAL PASSPORT CLEARANCE FOR FOREIGN TRAVEL

Prepare original and seven (7) copies in accordance with A.O. 204-1, Appendix A.
Route through appropriate channels for required signatures.
Section I - Complete for all proposed foreign travel.
Section II - To be endorsed by AID if travel is under PL 87-195.
Section III - Complete **only** Item 1 if employee **has been** granted security assurance for foreign travel within the last 12 months.
Complete only Item 2 if employee **has not been** granted security assurance for foreign travel within the last 12 months.
Section IV - Complete applicable items.

DATE OF REQUEST	BUREAU OR OFFICE	ESTIMATED COST, OR AGENCY PAYING, IF OTHER THAN COMMERCE
3/16/83	NOAA, NMFS, SWFC Honolulu Laboratory	~~$3,000.00~~

Section I - FOREIGN TRAVEL INVOLVED

PERTINENT STATE DEPT. INFORMATION, ITEMS 1 THRU 9

1. FULL NAME OF EMPLOYEE (First, Middle, Last)	2. TITLE AND GRADE
George Harvey Balazs	Wildlife Biologist, GS-11

3. DATE OF BIRTH	4. PLACE OF BIRTH	5. DEPARTURE DATE	6. EXPECTED RETURN DATE
2/26/43	Detroit, Michigan	7/15/83	7/28/83

7. IF ASSIGNMENT IS TO OFFICIAL FOREIGN POST OF DUTY STATION (Check which)
☐ NEW POSITION ☐ REPLACING (Name of person)

8. COUNTRIES TO BE VISITED AND PURPOSE OF TRAVEL (Include name of group sponsoring conference, meeting, etc.)

Costa Rica, Central America. To participate in the Western Atlantic Turtle Symposium (WATS); Ad hoc meeting on Eastern Pacific sea turtle research.

9. DEPENDENTS TO ACCOMPANY EMPLOYEE (Full name of each, relationship to employee, date and place of birth)

NONE

10. INTERNAL CLEARANCES	11. SIGNATURE OF ADMINISTRATIVE OFFICER	DATE
	for Adm. H. Ross AA for Fisheries	4/15/83

Section II - APPROVED FOR TRAVEL UNDER PL 87-195 (Endorsement by AID to be obtained by primary org. unit, when required)

Section III - SECURITY ASSURANCE (Attach one copy of SF-86, if not previously submitted by employee)
NOTE - If employee was granted security assurance for foreign travel within the past 12 months, complete Item 1 only.

1. I CERTIFY that the above employee was granted security assurance for foreign travel within the past 12 months (See Appendix A, A.O. 204-1) →	SIGNATURE OF PRIMARY ORG. UNIT AUTHORIZED OFFICIAL	DATE GRANTED

2. WILL EMPLOYEE HAVE ACCESS TO CLASSIFIED MATERIAL? ☐ YES ☐ NO	a. IF "YES," DEGREE OF CLASSIFIED MATERIAL

3. For use of Office of Investigations and Security - THE EMPLOYEE HAS BEEN GRANTED SECURITY CLEARANCE AS FOLLOWS:

a. DEGREE	DATE GRANTED	b. BASIS OF CLEARANCE
	5/31/83	Clear NAC by O/Sy

c. APPROVED (Signature of Director, Office of Investigations and Security) →	DATE APPROVED
Michael N. Cassetta Michael N. Cassetta, Director	6/2/83

Section IV - REQUEST FOR OFFICIAL PASSPORT CLEARANCE

TO: The Director
Passport Office
Department of State

FROM: (Signature of designated passport liaison officer)
Gloria E. Beatty - 443-8581 Gloria E. Beatty

It will be appreciated if passport clearance is granted for the employee's travel described in Section I, Items 1 thru 9).

1. ACTION	2. PRESENT PASSPORT NO.	3. DATE ISSUED	4. RETURNED TO STATE (Date)
XX PASSPORT APPL. BEING MADE ☐ PASSPORT ATTACHED			

COPY 3

ORDER FORM

A MANUAL OF SEA TURTLE RESEARCH
AND CONSERVATION TECHNIQUES

Prepared for the Western Atlantic Turtle Symposium

EDITION II.

Authors: Peter C. H. Pritchard, Peter R. Bacon, Frederick H. Berry, John Fletemeyer, Archie Carr, Robert M. Gallagher, Robert R. Lankford, Rene Marquez M., Larry H. Ogren, William G. Pringle, Jr., Henry M. Reichart, and Ross Witham.

Editors: Karen Bjorndal and George Balazs

To be printed and available in separate English and Spanish copies during late 1983.

Cost $10.00 per copy.

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W. A. T. S.
S. T. A. O.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

To : George Bolegs 9/21/83

From: Iz Barrett

George -

A beautiful, warm yet objective paper, which I'm sure you must be very pleased with!

My thanks —

Iz

TRANSMITTAL FORM CD-82A (10-87)
PRESCRIBED BY DAO 214-2

☆ U.S. G.P.O. 1982-664-006/1077

10/24/83

Dear Dr. Barnett -

I appreciated your complimentary note of 9/21 concerning my paper accepted for Holl Research Bulletin. I find it professionally rewarding working for NMFS, so it is important to me to be a credit to the agency.

Sincerely,

George Balazs