

Amigos Fellowship and Opportunity Award
FINAL REPORT

**Digitizing and Promoting Greater Access to the Contributions in Marine Science, formerly
Publications of the Institute of Marine Science**

Liz DeHart, award recipient
University of Texas Marine Science Institute, Marine Science Library
Port Aransas, TX 78373
May 28, 2014

Executive statement

The main objective of digitizing the collection, including its former title, *Publications of the Institute of Marine Science*, was to increase access and provide greater visibility, transforming the publication into digital format and making it available in the University of Texas Digital Repository (UTDR).

NOTE: The overall digital project was accepted in the first round of proposals by the UT Libraries Digital Projects Oversight Committee (DPOC) in March 2012, just prior to receiving funding from the Amigos Fellowship and Opportunity Award.

Background

The University of Texas Marine Science Institute has published its own scientific journal, *Contributions in Marine Science*, providing institutions all over the world with important data and research since 1945. Prior to this project, the publication was not available online and in order to increase access and provide greater visibility, transforming the printed journal into digital format was needed.

In May 2012, Amigos awarded the recipient \$2,900 to assist in digitizing the *Contributions in Marine Science* and making it available in the University of Texas Digital Repository (UTDR). The grant enabled the University of Texas Libraries to hire a graduate student technician to assist with the creation of a metadata template. In addition, she was responsible for uploading and describing all the volumes of the collection and assisting with web page indexing. The goals of the project were originally two-fold: 1) digitization and uploading into UTDR and 2) moving toward online publishing through Open Journal Systems (OJS), hosted by Texas Digital Library (TDL). Since the Marine Science Institute is still considering the future of its journal, the second half of the project was placed on hold.

Project Management

Catherine Hamer, Associate Director – sponsor

Liz DeHart, Marine Science Librarian - project owner/manager, contact person, provide status reports and communication plan, supervise activities, reporting requirements, evaluations and presenting the project to community users

Jennifer Lee, Head Librarian, Preservation and Digitization Services – project lead, coordinate tracking project tasks and the project plan document

Colleen Lyon, Digital Repository Librarian, UT Libraries – representing UTDR, responsible for coordinating all activities of the digitization process until completion

Amy Rushing, - Digital Access Services, Head Librarian, representing metadata

Wendy Martin – Manager, Digitization Services and Conservator, representing digitization, student coordinator

Franny Gaede – graduate student technician, assisting with metadata, uploading and indexing

Margaret Larsen – Marine Science Library staff assistant – page bitonal, reviewing issues, shipping

Project Description, Milestone/Deliverables

33 volumes, 4 supplements, 5 volumes already in PDF format

project to run for two years from May 2012 to April 2014

page count data, color and greyscale bitonal completed for journal (attached)

pack/ship volumes to Austin

digitize and OCR issues

create metadata, upload to UTDR

create catalog records in library catalog

Project Activities

Preliminaries:

- 1) Digital Projects Oversight Committee (DPOC) Orientation Meeting in Austin
Agenda: Roles and responsibilities of project owner, project planning (what, how, when), identify team members, plan kickoff meeting
- 2) DPOC Project Kickoff Meeting (teleconference call)
Agenda: overview, roles and responsibilities, getting started, action items

Specific tasks:

- Create Gantt chart to track project timeline and issues; each project team member identified specific, top level tasks to build on the chart until completion of project
- Evaluate and review condition of volumes, pack and ship to Austin (recommended 4 volumes per month)
- Scan pages; upload digital content onto server
- Send content already available in PDF
- Verify collection
- Review for metadata creation, quality and maintenance control
- Digitize content taken from server and upload into UTDR
- Plan, promote, disseminate information
- Post survey using SurveyMonkey

- Gather comments and web usage statistics
- Prepare and submit final report

Timeline:

Work on the digital project for Contributions began in May 2012 and concluded in October of the same year, which was much earlier than expected. Team members agreed to push forward and also digitize the earlier title, *Publications of the Institute of Marine Science*. Because of some content and page foldouts, scanning those issues was a bit problematic and took longer to process. All issues of this title were digitized and made available in the UTDR in January 2014.

Metadata specifications

<i>Element</i>	Definition	Example	Dublin Core	Repeat
Creator	The name of the institution responsible for making the journal	University of Texas Marine Science Institute	dc.creator	N
Editor(s)	Editor(s) of volume, if applicable	Wohlschlag, Donald E.	dc.contributor.editor	Y
Creation Date	Date indicating when the volume was published.	1976-09	dc.date.created	N
Table of Contents	A reproduction of that issue's table of contents	(see "Cancer studies II" in UTDR for TOC formatting)	dc.description.abstract	N
Language	The ISO language code that represents the language used in the volume	eng	dc.language.iso	N
ISSN	ISSN of journal	0082-3449	dc.identifier.issn	N
Publisher	The name of the entity responsible for making the journal available; use publisher imprinted on the piece.	Port Aransas Marine Laboratory, University of Texas Marine Science Institute	dc.publisher	N
Subjects	The broad topics that best describe the content of the journal title. If volume is "special issue" add topic(s) that describe the content of that volume.	Marine biology – Gulf Coast (U.S.) Marine biology—Mexico, Gulf of	dc.subject.lcsh	Y
Title	The identifying name of the journal with volume number. Add "supplement" where applicable.	Contributions in marine science volume 33 or Contributions in marine science volume 20 supplement	dc.title	N
Alternative Title	Any other titles associated with the journal, such as a preceding title or succeeding title.	Publications of the Institute of Marine Science	dc.title.alternative	N
Type	The nature of the work	Journal	dc.type	N
Department	The university department responsible for making journal available online in UTDR; the owning institution.	University of Texas Libraries	dc.description.department	N

Changes made by A. Rushing 09/13/2012

Dissemination of Information

As means of leadership role and professional development, the grant recipient had the opportunity to present poster sessions at two prominent conferences, during the preliminary plans of the project:

- Texas Conference on Digital Libraries, Austin, May 24-25, 2012
- International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC) Conference, Anchorage, Alaska, August 26-30, 2012

Information was also announced in the UT Libraries Update Newsletter, March 2014.

Evaluation and Comments

A survey was posted on SurveyMonkey which began in February 20, 2014 and closed on March 28, 2014. Five questions were posed:

1. How important is this publication to you?
2. How often do you use this particular resource?
3. How often did you use this resource before it was digitized?
4. Have you told any of your colleagues about this resource?
5. Do you have any other comments, questions, or concerns?

Analyzed results and comments

[see attached]

NOTE: Identifying information for comments were removed

Usage Statistics

As of May 9, 2014

Publications, Volume 1, Number 1: 256 page views, 141 downloads
Publications, Volume 1, Number 2: 80 page views, 57 downloads
Publications, Volume 2, Number 1: 147 page views, 126 downloads
Publications, Volume 2, Number 2: 117 page views, 265 downloads
Publications, Volume 3: 382 page views, 82 downloads
Publications, Volume 4: 525 page views, 129 downloads
Publications, Volume 5: 172 page views, 182 downloads
Publications, Volume 6: 181 page views, 131 downloads
Publications, Volume 7: 81 page views, 97 downloads
Publications, Volume 8: 117 page views, 160 downloads
Publications, Volume 9: 62 page views, 140 downloads
Publications, Volume 10: 103 page views, 107 downloads
Publications, Volume 11: 113 page views, 82 downloads
Contributions, Volume 12: 411 page views, 150 downloads
Contributions, Volume 13: 325 page views, 92 downloads
Contributions, Volume 14: 251 page views, 66 downloads
Contributions, Volume 15: 316 page views, 117 downloads
Contributions, Volume 15 supplement: 326 page views, 78 downloads
Contributions, Volume 16: 293 page views, 88 downloads
Contributions, Volume 17: 280 page views, 73 downloads
Contributions, Volume 18: 327 page views, 110 downloads
Contributions, Volume 19: 259 page views, 78 downloads
Contributions, Volume 20: 263 page views, 107 downloads
Contributions, Volume 20 supplement: 408 page views, 85 downloads
Contributions, Volume 21: 272 page views, 89 downloads
Contributions, Volume 22: 245 page views, 81 downloads
Contributions, Volume 23: 339 page views, 126 downloads
Contributions, Volume 24: 300 page views, 90 downloads

Contributions, Volume 25: 279 page views, 91 downloads
Contributions, Volume 26: 302 page views, 98 downloads
Contributions, Volume 27: 479 page views, 252 downloads
Contributions, Volume 27 supplement: 584 page views, 1099 downloads
Contributions, Volume 28: 348 page views, 114 downloads
Contributions, Volume 29: 301 page views, 115 downloads
Contributions, Volume 30: 278 page views, 87 downloads
Contributions, Volume 30 supplement: 420 page views, 116 downloads
Contributions, Volume 31: 276 page views, 101 downloads
Contributions, Volume 32: 295 page views, 88 downloads
Contributions, Volume 33: 357 page views, 107 downloads
Contributions, Volume 34: 413 page views, 102 downloads
Contributions, Volume 35: 521 page views, 110 downloads
Contributions, Volume 36: 422 page views, 689 downloads
Contributions, Volume 37: 521 page views, 297 downloads
Contributions, Volume 38: 626 page views, 736 downloads

Objectives

The first objectives of the project were successfully accomplished:

- Digitize the collection and making it available online in the UTDR
- Increase awareness and lessen time associated with interlibrary loan requests
- Creating an ideal model to digitize other collections published by the institute

The second objective was temporarily placed on hold until further review of the publication
Future online publishing through Open Journal Systems hosted by Texas Digital Library

Conclusion/Recommendation

The digital project was an instant success, considering the positive feedback provided by users and other queries made during the process. The web usage statistics justified the importance of digitizing the unique collection, making it available for all interested users seeking information about the collection.

The Amigos Award funding provided the recipient a great opportunity and experience for writing a grant, which was consequently a first-time achievement. The award also provided the funding for hiring a technical graduate student which was pivotal in completing the project.

It is highly recommended that there be another digital project for the Marine Science Institute technical reports, which have a long history of eminent research in the surrounding area dating back from 1948.

The Marine Science Library, the University of Texas Libraries and the project team members would like to take this opportunity to thank Amigos for its kind generosity and support for the digital project, "Digitizing and Promoting Greater Access to the Contributions in Marine Science, formerly Publications of the Institute of Marine Science."

Attachments to Report

Page bitonal

Project Tasks - DeHart

Survey results and comments

Submitted by Liz DeHart, May 28, 2014

Contributions in Marine Science / Data for Scanning Project					
Volume	Cover color	Greyscale	Color Pgs	B/W Pgs	Total Pgs
12	2	17	0	270	287
13	2	5	0	164	169
14	2	9	0	149	158
15	2	29	0	266	295
SUPPL. 15	2	32	1	97	130
16	2	1	0	179	180
17	2	4	0	182	186
18	2	3	0	255	258
19	2	1	0	124	125
20	2	4	0	144	148
SUPPL. 20	1	0	0	189	189
21	2	4	0	179	183
22	2	2	0	210	212
23	2	1	0	124	125
24	2	5	0	130	135
25	2	0	0	197	197
26	2	2	0	193	195
27	2	1	0	226	227
SUPPL. 27	1	11	0	868	879
28	2	3	0	161	164
29	2	9	0	153	162
30	2	10	0	103	113
SUPPL. 30	2	7	0	179	186
31	2	0	0	166	166
32	2	1	0	144	145
33	2	1	19 (includes lining pgs)	72	92
34	2	0	0	231	231
35	2	6	0	115	121
36	1	0	0	193	193
37	2	19	0	100	119
38					
TOTAL		162	20	5124	5306

PDF |

yes
yes
yes
yes
yes

Project Top Tasks

Liz DeHart, Project Owner – Marine Science Library

Responsibilities

- Gives guidance on the overarching vision of the project
- Works with DPOC to create Project Plan
- Creates and executes the Communication Plan for the project
- Regularly solicits information from project team to create status reports
- Works closely with Project Lead (Member of DPOC)

Purpose

To identify all the highest level work components that are needed to complete the project, in order to begin scheduling various tasks.

- Review Contributions collection
 - Find and gather any loose issues of Contributions - **completed**
 - Review for damages - **completed**
 - Ask editor for any available issues in PDF - **completed**
 - Receive and save PDF files - **completed**
 - Work on page count data (color, greyscale, and bitonal) - **completed**
 - Send data to Project Team - **completed**
- Arrange logistics for shipping volumes to PCL
 - Gather volumes (including supplements) and place in one location, in preparation of shipment - **completed**
 - Box up volumes – **completed**
 - Ship boxes via Texpress courier service to UT Libraries Digitization Unit
 - Addendum: Per Wendy Martin's request via phone call, 6/8/12, I've sent volumes 12-15 by Texpress for initial reviewing - **completed**
 - All volumes sent – **completed**
- Make arrangements to send available PDFs
 - Send PDFs for volumes 34-38 to team member, Colleen Lyon, UTDR **completed**
- Continue to provide information and feedback
 - Create and execute communication plan – **completed**
 - Solicit information from project team to create status report – **completed**

- Post survey, gather statistics, evaluations, comments
 - Survey posted on Survey Monkey – **completed**
 - Comments gathered – **completed**
 - Usage statistics compiled – **completed**

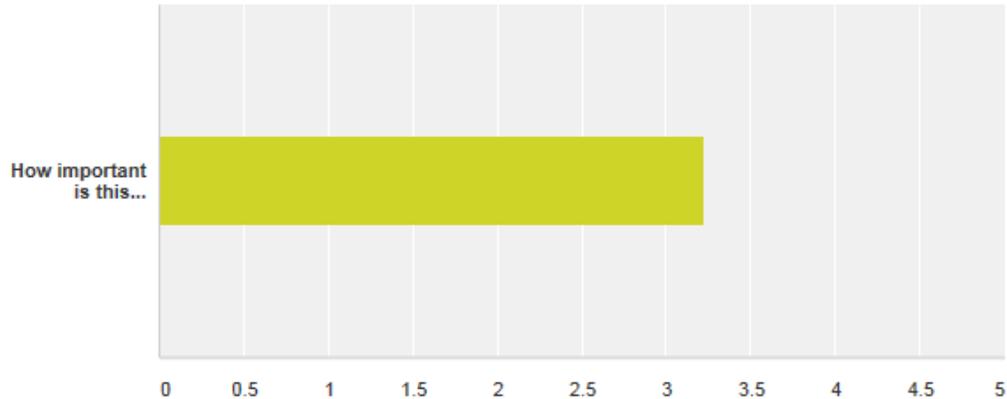
- Prepare and submit Final Report, documents, financial statement
completed May 2014

Digitizing and Promoting Greater Access to the Contributions in Marine Science, formerly Publications of the Institute of Marine Science
(cont.)

Analyzed results and comments

Importance

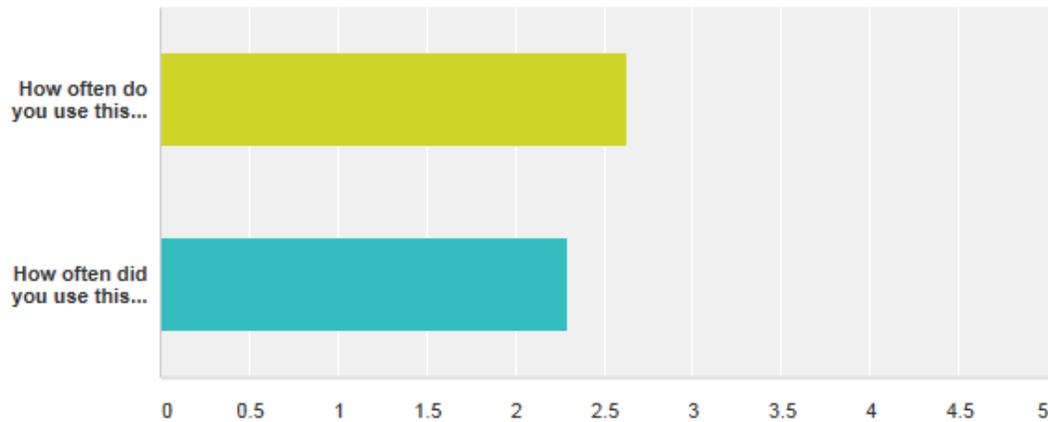
Answered: 30 Skipped: 1



	Extremely important	Very important	Moderately important	Slightly important	Not at all	Total	Average Rating
How important is this publication to you?	16.67% 5	23.33% 7	33.33% 10	20.00% 6	6.67% 2	30	3.23

Usage

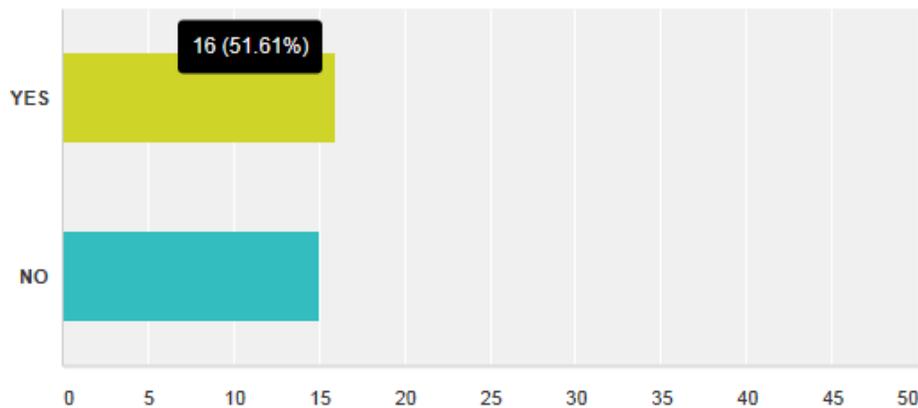
Answered: 30 Skipped: 1



	Extremely often	Very often	Moderately often	Slightly often	Not at all	Total	Average Rating
How often do you use this particular resource?	3.33% 1	16.67% 5	33.33% 10	33.33% 10	13.33% 4	30	2.63
How often did you use this resource before it was digitized?	3.70% 1	3.70% 1	37.04% 10	29.63% 8	25.93% 7	27	2.30

Have you told any of your colleagues about this resource?

Answered: 31 Skipped: 0



Answer Choices	Responses
YES	51.61% 16
NO	48.39% 15

Total Respondents: 31

Do you have any other comments, questions, or concerns?

Answered: 17 Skipped: 14

Showing 17 responses

Thank you for doing this.

3/17/2014 5:39 PM [View respondent's answers](#)

None

3/12/2014 4:56 PM [View respondent's answers](#)

Good to learn of digitization of old issues but it has been available to us in our library (NMFS Panama City) Very volatile time for libraries and publishing--many concerns for researchers. Regret that CMS quit annual publication after 1991--reason for "slightly" accessed on usage score. I believe an open access Gulf regional journal for the marine sciences would be very important. Gulf of Mexico Science --not open access and not available online Gulf and Caribbean Research has been suspended. I ask if costs are prohibitive to start back up--even in digital format only?

3/12/2014 2:45 PM [View respondent's answers](#)

I may be searching it incorrectly and apologize if I am. I am going to this site http://www.lib.utexas.edu/msl/research_guides/bibliographies/contributions_marine_science which then forwards me to <https://repositories.lib.utexas.edu/handle/2152/18044> . From there I have to download an entire issue which takes time and the TOC's are unwieldy. I think it works perfectly as a repository but not really as user friendly as a digital journal subscription. Again apologies if I am missing something. Thank you for allowing me to comment

3/12/2014 9:21 AM [View respondent's answers](#)

A periodic email of the table of contents would be helpful when new issues come out.

3/12/2014 7:52 AM [View respondent's answers](#)

Will add it to our Link resolver soon, if you allow.

3/12/2014 6:44 AM [View respondent's answers](#)

I think the resource is reasonably important, but I honestly don't often inquire about its availability.

3/11/2014 4:24 PM [View respondent's answers](#)

Thank you for digitizing! We have the full set in print, but our researchers have much more flexibility with the online available 24/7.

3/11/2014 3:54 PM [View respondent's answers](#)

Apologies for the negative answers above, but up to this survey, I was not aware of the existence of CMS. At a first glance, it looks like a very interesting publication that I might consult more often in the future.

3/11/2014 3:47 PM [View respondent's answers](#)

For certain local themes and topics, this journal is extremely important, and has some very classic literature related to the Texas coast. Prior to having it in digital form, however, I had simply not consulted this journal because we did not have it locally. Yes, I could have ordered it via interlibrary loan, but embarrassingly, it was easy to simply avoid doing so. Yet once these started appearing online, wow, I realized how critically important this literature was, and I kicked myself for not obtaining certain key articles earlier. That said, you guys have done an absolutely wonderful job of digitizing these things in high resolution for posterity. The difference is that sometimes when you get something from interlibrary loan, the quality is not that good so figures with fine/thin lines, photographs, tiny text/tables can be rendered essentially useless. But I have not seen anything like that in the articles I have consulted. In sum, your efforts are very much appreciated, and making this journal free and easy to access online will ensure that the important science it contains will not be lost to future generations. Thank you again for your efforts!

3/11/2014 3:20 PM [View respondent's answers](#)

Even if I don't use it regularly, I'm glad it's there as a digital archive and resource for the future! There are a lot of valuable papers and data in there.

3/11/2014 3:18 PM [View respondent's answers](#)

I am in an agricultural library that is in the center of a state. Scientists here are interested in topics such as the kudzu bug, palmer amaranth, tomato spotted wilt virus, increasing cow milk production, and biofuel production.

3/11/2014 3:07 PM [View respondent's answers](#)

I think its critical to digitize as much as possible. There are lots of important research reports that don't show up on search engines like Web of Science and Google Scholar simply because no one can access them. Thanks for your efforts!

3/11/2014 2:33 PM [View respondent's answers](#)

Have a complete paper set so have not used the link yet, but will. Have sent links to many, some who have little knowledge of the publications.

2/26/2014 4:42 PM [View respondent's answers](#)

Not only is the information contained in these reports very beneficial but having them readily accessible allows for quicker turnaround when answering allowing one less hurdle in obtaining these reports.

2/24/2014 11:15 AM [View respondent's answers](#)

Past issues are increasingly threatened of being lost either by use or the acts of Mother Nature. On September 13, 2008 Hurricane Ike flooded our lab with 4ft of water. Among the loss were 15-20 volumes of early issues. Since, digital copies have been requested from the UT – Port Aransas library. It would surely be

good show

2/20/2014 5:04 PM [View respondent's answers](#)

Email comments – **NOTE:** Identifying information were removed

Congratulations on getting this completed. I have submitted the link so that it can be added to the serial record in Stanford's catalog.

Thanks to all of you for making this happen.

..., I would like to commend UT on its efforts to make this material available in easily accessible electronic format. This is really classic and fundamental literature with respect to coastal and marine science both here in Texas and further afield. But in many cases, literature like this is starting to become "lost". This is not because it is actually disappearing, but because when modern material is available in easily accessible electronic format, it is easy to avoid older material that is locked up in hard copy format. By moving this literature into digital format, you are ensuring that it will continue to serve the science community for generations to come. In a time of constantly shrinking budgets, some may feel that dedicating the time and resources to such efforts might not be worth it. But I can assure you as a scientist that such efforts are extraordinarily appreciated! Importantly, all this important, pre-existing work done by our predecessors will not simply become "lost" due to inconvenience. Thank you so much for this!

Very nice! Good job.

I am glad to see these publications getting digitized and deposited on the web. There have been numerous times in the past that I have needed one of these articles and had to travel to get it. This Breuer article is one that we've wanted to obtain for some time now.

Thanks again, I really appreciate the assistance!

So there is more than one team making TOUCHDOWNS on a UT Campus!!

What a Contribution, to play on words a little!!! Amazing your timing, my open request for Vol 3 just finished downloading, scrolling through the pages now. It took <30 min for the download. Not too bad for 237Megs. Give it another year and the internet speeds will double!! Great use of Grant money. GO GRANTS!!

It seems your idea to put the series in the digital archive was prescient.

My name is ... and I am a former undergraduate student of UTMSI and current research associate at I am interested in seeing if I can get you all to put up an article in pdf format that was part of your now defunct Contributions in Marine Science journal that UTMSI used to put out in print form. The article is Fry and Sherr, Contributions in Marine Science (1984) Vol. 27 13-47. Looking at Web of Knowledge, it has been cited 931 times and yet there still continues to be no online presence for the article. I realize it's a defunct journal, and I do not mind hunting through the stacks to find a personal copy as I have done. I just keep running into folks that know of it, have referenced it, but have never actually seen the article. I have nothing to gain by this, but I thought I would bring it to your attention. I personally think there is much value in having this resource readily available to stable isotope ecologists, and since UTMSI is

where the article originated from, I figured I would address my concern directly to you since the librarians at ... didn't seem to care when I brought it up with them. I understand that digital representations require time, effort and money to maintain, and that these may be the reasons for no such representation existing, but I think it's unfortunate that something so widely recognized is not readily available. Thank you for your time. Thank you for your effort, I am just glad to see that this is available!

First, I'd like to offer my eternal thanks for your work in digitizing this journal. You did a wonderful job and I appreciate it.

Congrats. It's nice to hear of something actually completed, and on time to boot.

I was thrilled to see volumes 3-4, and 12-38 of the UTMSI Contributions in Marine Science available in electronic format online at the UT Digital Repository. Do you have any idea about the status of the earlier volumes 1-2 and 5-11 regarding getting them online? Many thanks in advance for your response.

Email interlibrary loan requests:

I am doing some research on oysters from the Laguna Madre and have come across a UTMSI publication entitled "Breuer JP. 1962. An ecological survey of the lower Laguna Madre of Texas, 1953-1959. Publ. Inst. Mar. Sci. Univ. Tex. 8:153-83." I am wondering if there is an electronic copy of this article at the MSI library, and if so I'm wondering if it could be forwarded to me. Otherwise, is there any chance of getting a hard copy of this in lieu of electronic? I am willing to pay whatever fee would be necessary for copy and mailing of the material.

From a GREAT PUBLICATION AND MARINE SCIENCE WORKER!!

Hedgpeth, Joel W. 1953. An introduction to Zoogeography of the Northwestern Gulf of Mexico with Reference to the Invertebrate Fauna. Publications of the Institute of Marine Science 3(1):107-224. PDF copy would be great. Thank YOU!

I've been fruitlessly trying to get a copy of the Hellier 1962 paper (Fish production and biomass studies in relation to photosynthesis in the Laguna Madre of Texas) that was published in Publications of the Institute of Marine Science, which I understand is now Contributions in Marine Science. I've been able to locate a few volumes of PIMS online through the UT Marine Science library, but cannot find Volume 8 for the life of me. This is likely a long shot, but is there any possibility you have a copy of that publication, or know where I could find it? ..., can you help me get a PDF copy of this article? I guess I can do an inter-library loan request through NC State University but when I searched for this article through our system, it did not come up with an inter-library loan option like other books and journals do. Any help or advice would be great.

I am a current phd student in department of Biosystem Engineering, University of Tennessee. I am now working on the project of wetland aquatic metabolism rate estimate, and I found over 200 papers had referenced the paper "Comparative Studies on the Metabolism of Marine Waters, (Odum 1958)" from your department Journal- Publications of the Institute of Marine Science. This paper is really interesting to me and very helpful for my current research work,

however, I cannot find or download this important paper from any database. Would you mind send me a pdf copy of this paper "Odum, Howard T. and Charles M. Hoskin. 1958. Comparative Studies on the Metabolism of Marine Waters, 5:16-46." ? Thank you very much for your kind assistance and looking forward your reply.