

A Legacy Report for Harley Ichiro Manner, Ph.D. and Emeritus Professor of Geography and Micronesian Studies

1. Brief Personal Background Information:

- Born and raised on O‘ahu, Terr. Of Hawaii in May 1941. *Hanai* son of Christopher B. Manner and Tamaye Tanaka Manner. I have two younger brothers and one sister, a daughter and three grandchildren. Attended St. Joseph’s School in Waipahu, O‘ahu, St. Louis and University High in Honolulu. Now retired and living on Maui with Dr. Mary Spencer.

2. Brief Academic Background Information:

- Attended University of California 1959-61 before moving back to Hawaii to complete undergraduate and graduate degrees. I received the M.A. (Geography) and Ph.D. (Geography) from the University of Hawaii at Manoa in 1969 and 1976 respectively, based on fieldwork in vegetation ecology and traditional agriculture in the Bismarck Mountains, PNG. BA (1964) also in Geography from Univ. of Hawaii.

3. Year that your UOG Employment Started/Year UOG Employment Ended/Duration of Employment at UOG:

- Employment at UOG began in Jan 1986; Retired: May 2008; Duration: 22 years, 6 months.
- In addition to my employment at the University of Guam, I also held faculty positions at Bucknell University in Lewisburg, PA (1974-1979) and the University of the South Pacific in Suva, Fiji (1979-1986). I have also held visiting/sabbatical positions at:
 1. Yale University, New Haven, CT, School of Forestry and Environmental Studies, Visiting Professor of Forestry and Environmental Studies (January - February 1982 and September - December 1982)
 2. Kagoshima University, Kagoshima Japan. Visiting Foreign Researcher, Kagoshima University Research Center for the South Pacific (June 1 - November 30, 1994)
 3. University of Wollongong, Wollongong, Australia. Visiting Professorial Fellow, Department of Environmental Sciences (March 1, 2003 - August 21, 2003)

4. Highest Academic Rank You Held and Your Major Field/Academic or Administrative Position(s) at the time of retirement:

- Full Professor of Geography (Jan 1990-May 2008)
- During my tenure at UOG, I served as:
 1. Chairman, Division of Social and Behavioral Sciences, January 1990-December 1992; December 1992 –December 1993; January 1996 - August 1998; 1998-1999
 2. Special Assistant to the Dean (Spring 2001-Spring 2002)
 3. Acting Associate Dean, Sept. 19-Oct. 6, 1997; April 2-16, 1998; June 28-August 20, 2001; June 25-Aug. 23, 2002; Acting Dean, April 12-16, 2002
 4. Unit Representative and Division Coordinator. Div. of Social and Behavioral Sciences, 2004- 2008
 5. Chairman, Micronesian Studies Program, Sept. 2004-June 2008

5. How were you recruited by UOG? What in particular brought you to UOG?

I met Roy Tsuda and Lu Eldridge of the Marine Lab at a SPREP (South Pacific Regional Environment Programme) meeting in Port Moresby, Papua New Guinea in 1985. They suggested I apply to UOG for the vacant position in Geography. They noted that UOG wanted a more vigorous research agenda by the teaching faculty. I viewed the UOG position as a great opportunity to live in and do research in Micronesia, having spent most of my academic career in Melanesia and Polynesia.

6. What UOG was like at the time of the beginning of your employment as you remember?

The campus was smaller with fewer permanent buildings: The Fieldhouse, Administration Building, Buildings A & B, were some of them. Science, Fine Arts, and the Marine Lab were also housed in permanent buildings. Most academic units (Arts and Sciences, Education, Business) at UOG in 1986 were housed in Buildings A and B. CALS was located in Dean Circle. I had an office in Building A which I shared with Dr. Mary Spencer. A few years later, my office was relocated to the Old Student Center, a leaky wooden structure which was destroyed by a hurricane around 1992. My office was moved to Warehouse 1, then finally to the Humanities and Social Sciences building of CAS (CLASS). At the time of my hire it was the custom of new faculty to be housed in the home of a faculty member, so along with Bob Richmond of the Marine Lab, I spent the first two weeks on Guam at the home of Lu Eldredge in Yona. That arrangement gave new faculty the luxury to find their own housing and transportation and getting to know Guam and the university without the pressures of staying in a hotel and immediately finding a more permanent place to live. The Eldredge family was a great host and held parties to introduced new hires to the faculty.

Many faculty members took summer teaching assignments in either Chuuk, Pohnpei, Kosrae or Yap. In contrast, I looked on summers as a time of research fieldwork. There also seemed to be a greater number and proportion of students from the other islands of Micronesia, in particular Kosrae and Palau early in my career at UOG, then at the time I retired.

Often the university is resistant to innovations or new ways of doing things. In this regard, while university-supplied computers are standard equipment for all faculty now, such was not the case when I first arrived in 1986. None of the teaching faculty in the College of Arts and Sciences had an office computer. By contrast, the research faculty at the Marine Lab had office computers, in all likelihood bought with research grant funding. So, when I asked Patti Jo Hoff, the Dean of the college, for a computer, I was told to buy it with my own money, using the Marine Lab as the buying agent (as the college didn't have the right to do so). I did as told, but began lobbying for the college to provide computers for all faculty. Whether it was serendipity or my insistence, I do not know, but about two years later, the college began buying computers for faculty. Another example keeps me scratching my head. Sometime in the mid-1990s we were asked to develop online courses for a Western Governor's University project. As photographs and diagrams are an integral part of my courses, I requested a computer with a graphics interface/capabilities which would allow me to fully enhance my course presentation. In short, the University said no and I said likewise. To this day, I am not a fan of the Western Governor's University.

8. Special Memories of UOG – Teaching, Courses Taught, Field Trips, Field Schools, Research Projects, Conferences, Programs, Events, University Service, Community Service, Community and Regional Outreach and Engagement, Administrative Activities, Committee Activities, etc.

As a preface to answering set of items, a few comments on the principles that guided my work as a faculty member in teaching, research and service are in order. Firstly, research is an integral aspect of a university faculty as: (i) effective teaching goes hand in hand with research; (ii) a knowledge based on research is critical for the rational development of the region and leads to effective, meaningful community engagement (iii) research is applicable to academic activity, community service and outreach and (iv) research promotes the image of the university. Almost all of my research has concerned human use and modification of (Pacific islands) environmental systems. I focus on the traditional agricultural system/agroforestry of the Pacific Islands, which I feel are ecologically adaptive, sound and sustainable systems of land use. These systems of production are being impacted by global climate change and sea-level rise. It could be noted here that many people consider Geography as mainly Cartography (maps, map making). To remedy this viewpoint, on March 1, 2018, the Department of Geography's name at the University of Hawaii was officially changed to the Department of Geography and Environment to better reflect the work and focus of Geography.

- **Courses Taught, Developed and other program developments.** Developed and taught new courses in Geography and Micronesian Studies: Principles of Physical Geography (GE203), Cultural Ecology (GE/AN341/MI516), GE461 (Conservation and Natural Resource Management (GE461), and Physical Geography of Micronesia (MI506). I also revamped and taught the other core courses in Geography (Intro to Geography (GE101), World Regional Geography (GE201) and Geography of the Pacific (GE401). The only Geography course that I didn't teach was Economic Geography (GE/EC321). In addition to these program issues, I also began the process of reviving the minor in Geography and establishing and getting the second position in Geography.
- **Field Trips.** I particularly enjoyed taking my students in Physical Geography (GE 203) and Cultural Ecology (GE/AN 342 and MI516 to the Agana Swamp where Palauan residents/migrants to Guam were cultivating the swamp using the *mesei* system, a traditional, sustainable Palauan method of taro agriculture, and which shows one aspect of Palauan culture. Most residents of Guam are unaware of this sustainable use of seemingly useless/unused land.
- **Research Projects/Conferences.** Some of my research projects are presented below. Almost all of my research present basic or baseline information that have application to the physical and cultural development of the Pacific Islands and its peoples. I also include conference presentations together with my statements on research projects.
- **Undergraduate Training and Research In Agroforestry** (\$6220 grant from the South Pacific Regional Environment Programme in November 1985). In this project, eight (8) Micronesian undergraduate students were trained to do basic research in their traditional systems of agriculture (or agroforestry) and write up the results of their study. This project resulted in 2 publications with Micronesian students:
 - a. Manner, H. I., and Mallon, E. 1989. An annotated list of the vascular plants of Puluwat Atoll. *Micronesica*, 22(1): 23-63.
 - b. Manner, H.I., and Sana, D. 1995. The vascular plants of Losap Atoll. *South Pacific Study*, 15(2): 49-73.

- **Comparison of Low-Input and High-Input Taro Production in the American Pacific.** (Project for \$300,000 funded by USDA (LISA) and ADAP, 1989. In 1988, UOG President Fred Leon Guerrero asked me to help develop a collaborative research proposal on this topic for the land grant institutions in the Pacific. The project was funded and augmented by an additional grant from the land grant directors. As a result of this project, at least five UOG faculty were able to conduct surveys/research in other parts of the Pacific (e.g., American Samoa, Ulithi, Hawaii) while other faculty from the other Pacific Islands were able to visit Guam and the other islands of Micronesia. The project funded ¼ of my salary for one year and contributed to a number of conferences and workshops and publications. Six of my publications and conference papers from this grant are listed below.
 - a. Manner, H.I. 1993. Taro (*Colocasia esculenta* (L.) Schott) in the atolls and low islands of Micronesia. In Ferentinos, L. (Ed.), Proceedings of the Sustainable Taro Culture for the Pacific Conference, pp. 88-100. September 24-25, 1992, East-West Center, Honolulu. *HITAHR Research Extension Series* 140. Honolulu, Hawaii.
 - b. Manner, H. I. 1993. Guam. In Ferentinos, L., and Vargo, A. (Eds.), Taro Production Systems in Micronesia, Hawaii and American Samoa, pp. 37-46. *HITAHR Research Extension Series* 139. Honolulu, Hawaii.
 - c. Manner, H. I. 1993. Ulithi. In Ferentinos, L., and Vargo, A. (Eds.), Taro Production Systems in Micronesia, Hawaii and American Samoa, pp. 79-84. *HITAHR Research Extension Series* 139. Honolulu, Hawaii.
 - d. Manner, H. I. 1992. Traditional crop protection in Oceania: A preliminary review. In Schreiner, I., and Nafus, D. (Eds.), *Proceedings Second ADAP Crop Protection Conference*, pp. 92-99. University of Guam, Mangilao, Guam (May 29-30, 1990). Agricultural Development in the American Pacific, USDA.
 - e. Manner, H. I. 1990. Report of the rapid rural assessment of taro production systems. In Vargo, A., (Ed.), *A Rapid Rural Appraisal of Taro Production Systems on Eight Pacific Islands. LISA project on A Comparative Study of Low-Input and High Input Taro Production Systems in the American Pacific, with Special Reference to Pest Control*, pp. 27 - 47. US Department of Agriculture.
 - f. Manner, H. I. 1990. Report of a visit to Ulithi Atoll. In Vargo, A., (Ed.), *A Rapid Rural Appraisal of Taro Production Systems on Eight Pacific Islands. LISA project on A Comparative Study of Low-Input and High Input Taro Production Systems in the American Pacific, with Special Reference to Pest Control*, pp. 139 - 142. US Department of Agriculture.

In addition to my papers, the LISA project published the Proceedings of the Sustainable Taro Culture for the Pacific Conference, edited by Ferentinos (1992) which contains 31 articles on the topic, many written by LISA collaborators and others.

- **Resource Survey of the Rock Islands of Palau (1989).** In 1989 I was a member of a UOG research team that was commissioned to do an ecological baseline study of the Ngerukewid Islands of Palau. These islands are collectively known as the Rock Islands. The team consisted of Marine Lab faculty, Dr. Lynn Raulerson and me. For this project I was a co-editor for the survey report and a co-author of the chapter on the vegetation of

the islands (see below):

- a. Birkeland, C., and Manner, H. I. (Eds.). 1989. *Resource Survey of Ngerukewid Islands Wildlife Preserve Republic of Palau. A report to the Government of Palau, the South Pacific Regional Environment Programme, World Wildlife Fund, and the International Union for the Conservation of Nature and Natural Resources*. SPREP, Noumea.
- b. Manner, H. I., and Raulerson, L. 1989. Flora and vegetation of the Ngerukewid Islands Wildlife Preserve. Chapter 2 and Appendix 2. In Birkeland, C., and Manner, H. I. (Eds.), *Resource Survey of Ngerukewid Islands Wildlife Preserve Republic of Palau. A report to the Government of Palau, the South Pacific Regional Environment Programme, World Wildlife Fund, and the International Union for the Conservation of Nature and Natural Resources*, pp. 9 - 56 and 157 - 169. SPREP, Noumea, 193 pp.

These studies provided the baseline research data for the establishment of the Ngerukewid Islands Wildlife Preserve Management Plan. This island group and the surrounding rock islands were designated by UNESCO as the Rock Islands Southern Lagoon World Heritage Site in 2012.

- **Other Items Related to Research and Creative Activity.** Many of the publications cited earlier, contain maps that I have drawn and/or photographs of my field studies. In this subsection I wish to mention the maps that I have drafted for other academics or publications and my photographs that have been published by other authors or publications.
 - a. Map of the Mariana Islands. In Raulerson, L., and Rinehart, A.F. 1992. *Ferns and Orchids of the Mariana Islands*, p. 2. American Printing Corp, Guam.
 - b. Figure 5.5. Vegetation map of Guam. In Mueller-Dombois, D., and Fosberg, F.R. 1998. *Vegetation of the Tropical Pacific Islands*, p. 273. Springer, New York.
 - c. Map 1. Ulithi Atoll in the Western Pacific and close up of Ulithi Atoll, and Map 2. Other island entities near Ulithi Atoll. In Stephenson, R.A., and Spencer, M.L. (Eds.), 2019. *Ulithi Atoll, Micronesia: Recalling the Past, Reaffirming the Future*, p. 2. University of Guam Press.
 - d. Micronesia. *Isla: A Journal of Micronesian Studies*, 1992, 1(1)- 1996, 4(2). Folded map insert, p. vi in 1(1 & 2); p. v. in following volumes.
 - e. Photographs of Puluwat Atoll and Nauru. In Mueller-Dombois, D., and Fosberg, F.R. 1998. *Vegetation of the Tropical Pacific Islands*. Photo 5 H20, and Photo 5.11-5.16. Springer, New York.
 - f. Book cover photograph of a Puluwatese *m'aa*. Morrison, J., Geraghty, P., and Crowl, L. 1994. *Science of Pacific Island Peoples: Land Use and Agriculture*. Vol. 2. Institute of Pacific Studies, Suva, Fiji.

Finally, the UOG Herbarium contains a number of plant specimens that I and my colleagues (A. Rinehart, L. Raulerson, E. Mallon, and Mary Spencer) have collected from the other islands of Micronesia.

- **Community and Regional Outreach and Engagement, Administrative Activities.** Roundtable Workshop on Biodiversity Conservation in the Micronesian Hotspot. Pohnpei, FSM. August 2003. Conservation International. In 2003, I was asked by Conservation International to coordinate a workshop discussion on the conservation

needs of Micronesia. The information gathered would be used in developing an ecosystem profile for attracting funding for the conservation of important natural environment sites in Micronesia. To accomplish this task, I worked with the Nature Conservancy in Pohnpei to host the workshop and invite the needed experts to the meeting. Two outcomes of the workshop were:

- a. Manner, H. I. 2003. Micronesia Biodiversity Hotspot. Federated States of Micronesia, Commonwealth of the Northern Mariana Islands, Territory of Guam, Republic of Palau, Republic of the Marshall Islands. Critical Ecosystem Partnership Fund. Conservation International.
 - b. Atherton, J. (Editor and Compiler). 2004. The Polynesia-Micronesia Hotspot. Ecosystem Profile. Critical Ecosystem Partnership Fund. Conservation International, SPREP, etc. The final version of the Polynesia-Micronesia Biodiversity Hotspot: Ecosystem Profile was published in 2007 and is available on the web at: [Microsoft Word - Final.PolynesiaMicronesia.EP.doc \(cepf.net\)](#). The website presents Micronesian and Polynesian sites that have been protected for their environmental and cultural significance.
- **Capacity Building and Meeting Research Needs** on the Ecology of Global Change in Island Landscapes of the Republic of Palau (CBA2006-01NSY-Manner). Project for \$42,000 funded by Asia Pacific Network (Japan) in 2007. As the Micronesian Coordinator for PABITRA (Pacific Biodiversity Transect Network which is based at the University of Hawaii, directed this project which gave Palauan environmental scientists and agencies technical training and monitoring equipment in environmental analysis and monitoring. Six scientists from Hawaii participated in presenting their technical skills at two classroom and field workshops for this project. Information on this project and its success can be found in the following references.
 - a. Manner, H. I. 2007. Capacity Building and Meeting Research Needs on the Ecology of Global Change in Island Landscapes of the Republic of Palau. Interim Report for CAPaBLE Project: CBA2006-01NSY-Manner, submitted January 2007.
 - b. Manner, H.I. 2007. Capacity Building and Meeting Research Needs on the Ecology of Global Change in Island Landscapes of the Republic of Palau: CBA2006-01NSY-Manner. Final Report submitted to APN (Asia Pacific Network for Global Change Research), Kobe, Japan, May 24, 2007). 47 pp.
 - c. Manner, H.I. 2007. Capacity Building and Meeting Research Needs on the Ecology of Global Change in Island Landscapes of the Republic of Palau. (Second) Interim Report for CAPaBLE Project: CBA2006-01NSY-Manner, submitted April 2007.
 - d. Manner, H. I. 2006. Palau Workshop Report (August 2006). PABITRA in Palau. 1-6 pp. http://www.botany.hawaii.edu/pabitra/documents/Palau_Report.pdf
 - **Vegetative Guide Dashboard** funded by the Pacific Islands Climate Science Center, Honolulu

Finally, between 2014 and 2016, I worked as a consultant on a PSC project relating atoll agroforestry recommendations to predicted climate and sea level conditions in the Marshall Islands, This was a collaborative project involving the Pacific Aquaculture and Coastal Resources Center at University of Hawaii Hilo; Department of Natural Resources and Environmental Management at University of Hawaii at Manoa; USDA Forest Service,

Region 5 State & Private Forestry; USDA Natural Resources Conservation Service-Pacific Island Area; Ministry of Resources & Development (R&D); Marshall Islands; and College of the Marshall Islands/Sea Grant.

As a result of this effort, we developed an interactive website (see link below) that gives Marshall Islanders and other interested parties up to date information on the Marshallese agroforestry, weather and climate, particularly the incidence of El Nino and La Nina, and ways to mitigate their negative impacts of drought, salt water inundation of the coastal areas on their agricultural systems. The two outcomes of this effort are:

- a. Friday, K., Haws, M., Manner, H.I., Marra, J., Potemra, J., and Rufus, L. 2017. "Agroforestry in the Climate of the Marshall Islands." University of Hawaii. <http://oos.soest.hawaii.edu/pacific-rcc/Marshalls%20Agroforestry/site/> An interactive website developed for the Republic of the Marshall Islands.
- b. Manner, H.I., Friday, K.S., Haws, M., and Rufus, L. 2020. Agroforestry in the Climate of the Marshall Islands (*Green Dashboard*): An Interactive Website. *Pacific Asia Inquiry*, 11(1): 45-77.

I chose these three items because they show the applicability of research to serving community/social needs.

• **University Service, Committee Activities, etc.**

With respect to these categories, my university service and committee activities, beginning in 1986 when I started my tenure at UOG and ending in 2008 when I retired for the university are listed below:

- Chair, Micronesian Studies Program, 2004-2008.
- Chair or Unit Rep, Division of Social/Behavioral Sciences
- Faculty Senate, Chairman. Special Senate Committee on Rules and Procedures (RAP) (May 2001)
- Faculty Senate, Chairman, Special Senate Committee on Implementation (January 2001-May 2001)
- Faculty Senate Organizing Committee (Jan 2000-Dec 2000)
- University Academic Affairs Committee (May 1999-January 2001)
- Chairman, WASC Task Force, Standard 4.B. (1998-2000)
- College of Arts and Sciences Academic Affairs Committee, 1990 - 1994; January 1996-August 15, 1999.
- College of Arts and Sciences Awards Committee. 1992, 1997, 1999.
- Promotion and Tenure Committee, Aug 2002- Dec 2002; 1990 - Feb 1992; Sept 1995-May 1996.
- Micronesian Studies Committee, 1989 - 2008.
- University Research Council, 1990 - 1991.
- COE Data Bank Committee, Spring 1990.
- Chair, CAS Ad Hoc Committee on Research Assignment, 1990.
- Outside Employment Committee, 1990.
- Screening Committee for EWC Student Awards, 1989 - present.
- Charter Day Committee, Advisor, 1991; Chair, 1989 - April 1990; Co-chair, 1988 - 1989; Member, 1988.
- CAS Divisional Organization Committee, 1988 - 1989.

- University General Education Requirements Committee. 1986 - 1987; 1996-1997. Re-elected 1997; Chair, 1997-98, 1998-99.
- University Distance Education Committee, 1986 - 1987.
- Divisional Academic Master Plan Committee, 1986 - 1987.
- Peer Evaluation Committee for faculty members as needed.
- FSM Student Association, Faculty Advisor, Spring 1988 - 1989.
- Chi Omicron Gamma, Treasurer, 1987 - 1989; President, 1989 - 1991.
- Guam Academic Foundation, Treasurer, 1987 - 1990.
- Search Committees
 1. Member. MARC Director, 1987 to 1988; Saipan UOG Coordinator, 1989 - 1990; Health, Physical Education, Recreation and Dance, 1992; Social Work. 1994; Clinical Psychology. 1997; Geography. 1997, 2008; Sociology, 1997.
 2. Chair. UOG Public Relations Officer, 1989 - 1990; Political Science. 1993; Political Science, 1991; Geography. 1993; Sociology, 1998, 2008.
 3. Co-chair, MARC Director, 1986 - 1987.

I am probably most proud of my service as a member and chair of the University General Education Requirements Committee in defending it from administrators who wanted to remove it altogether, my role as chairman on the Special Senate Committee on Rules and Procedures (RAP) (May 2001) and the Senate Committee on Implementation (January 2001- May, 2001) which resulted in the establishment of the Faculty Senate, my service on the CAS Academic Affairs Committee which was an important in establishing the foundation for the college as it is constituted today (buildings, divisional structure, rules and procedures, to name a few. Finally as the chairman of the CAS Ad Hoc Committee on Research Assignment (1990), we developed the load assignment process and procedure used by the college to this day.

9. Academic Awards, Special Professional Recognitions, etc.:

- CAS Award for Excellence in Research. 1991, 1994.

10. Notable Publications or Creative Work Pieces, Workshops, Special Lectures and Seminars, etc. to be remembered:

I have more than 140 publications and reports, and more than 50 conference presentations. Most of my publications are referred A full listing of my papers are presented in my cv. In addition to the publications listed previously, here are a few more that I consider “notable”.

- Pernetta, J.C., and Manner, H.I. (Eds.). 1994. *Ecosystems of Small Islands in the Southwest Pacific (The Sixth Expedition of the SS "Callisto")*. UNEP Regional Seas Reports and Studies No. 151 and SPREP Reports and Studies No. 63. United Nations Environment Programme, Nairobi, and South Pacific Regional Environment Programme, Apia, Western Samoa. x + 220 pps.
- Manner, H.I. 2015. Sustainable agricultural systems of the Pacific Islands. In, Elevitch, C. (Editor), *Agroforestry Landscapes for Pacific Islands: Creating Abundant and Resilient Food Systems*, pp. 1-58. Permanent Agricultural Resources (PAR), Holualoa, HI. <http://www.agroforestry.net/projects/food-producing-landscapes>.
- Manner, H.I. 2013. Contributions of Clarence Y.C. Wong and Current Updates on the Flora of Romonum Island, Chuuk Lagoon, Federated States of Micronesia.

Ethnobotany Research & Applications, 11: 205-249.

<http://www.ethnobotanyjournal.org/index.php/era/article/view/856>.

- Manner, H. I. 2008. Directions for longterm research in traditional agricultural systems of Micronesia and the Pacific Islands. *Micronesica*, 40(1/2): 63-86.

11. Special Colleagues, Students, and Staff as well as Administrators to be remembered:

1. Dr. Mary L. Spencer, Dean Emerita of CLASS;
2. Dr. Patty Jo Hoff, Dean Emerita of CAS and Regent;
3. Regent Franklin Quitagua;
4. Dr. Fred Leon Guerrero

12. Public Service and Engagements to be remembered:

13. Your advice or Words of Wisdom for current and future professors or administrators:

- Guam is only a small part of Micronesia. Go teach and do research the other islands of Micronesia to get an understanding of the region. You and your students will be all the better for it.
- Guam has been very good to me. Give it your all and you will be happy for doing so.

14. Year you joined SEPRS:

- 2008