

# A new archaeological field survey of the site of Nan Madol, Pohnpei

Mark D. McCoy, Helen A. Alderson, and Adam Thompson

*Nan Madol, sometimes called the ‘Venice of the Pacific,’ is a mortuary and administrative site built from columnar basalt, boulders, and coral. It is made up of artificial islets that stretch over 83 hectares of lagoon on the volcanic high island of Pohnpei in the Federated States of Micronesia and is pivotal to our understanding of ancient Pohnpeian society. Nan Madol was first mapped in its entirety in 1910 by the German explorer Paul Hambruch and in the century since then the site has been re-surveyed and maps of varying levels of detail have been published. Here we report on the first full coverage field survey of the site’s artificial islets employing high precision GPS. The survey dataset has been made available for download as a Geographic Information Systems (GIS) layer at the data clearinghouse website: The Digital Archaeological Record (tDAR). We also report a matching annotated list of variant place names used in the literature and some brief information on the function of islets from oral traditions. This report, the digital map, and the annotated list of islets are aimed to provide future researchers with a baseline database.*

*Nan Madol, a veces llamada “La Venecia del Pacífico”, es un sitio mortuario y administrativo construido a partir de un basalto columnar, rocas y coral. Está compuesto de islotes artificiales que se extienden a lo largo de 83 hectáreas de laguna en la isla volcánica de Pohnpei, en los Estados Federados de Micronesia y es esencial para nuestro entendimiento de la antigua sociedad pohnpeiana. Nan Madol fue cartografiada en su totalidad por primera vez en 1910 por el explorador alemán Paul Hambruch, a partir de aquí y a lo largo del siglo el lugar ha sido estudiado de nuevo y se han publicado mapas con variedad de detalles. Aquí llevamos a cabo un primer y completo estudio de cobertura total de las islas artificiales del sitio, empleando GPS de alta precisión. El conjunto de datos está disponible para descarga a través del GIS (Sistema de Información Geográfica) en el sitio web de centro de intercambio de datos: The Digital Archaeological Record (tDAR). También informamos una lista comparativa anotada de variantes de nombres de lugares utilizados en la literatura y una breve información de la función de los islotes en las tradiciones orales. Este informe, el mapa digital y la lista anotada de islotes están dirigidos a proporcionar una base de datos en línea a los futuros investigadores.*

## Introduction

To archaeologists, ancient capitals are ideal places to learn more about how a region’s societies developed. In Polynesia, we find that administrative centers, such as Lapaha in Tonga (Clark et al. 2008; Hommon 2013) and the royal centers of the Hawaiian Islands (Kirch 2010), reflect the rise of archaic states. In Melanesia, when new colonial centers were built in the 19th century, traditional Fijian notions of chiefly power were explicitly incorporated in the architectural design to adapt to the local political scene (Chatan 2003). In Micronesia, one site stands out among others: Nan Madol on Pohnpei. Nan Madol, sometimes called the ‘Venice of the Pacific,’ is a mortuary and administrative site made up of artificial islets built over 83 hectares

of lagoon (Figure 1). These islets were constructed using distinctive columnar basalt, boulders, and an impressive amount of coral rubble fill, and they appear to have inspired the construction of the site of Lelu on Kosrae (Ayres 1993:69).

Our primary tool for studying large and complex archaeological sites, the ‘white paper’ field map, is today joined by a host of other spatial technologies – GPS, GIS, laser scanning, remote sensing, and so on (McCoy & Ladefoged 2009). While traditional survey remains at the heart of field archaeology, when it comes to sites like Nan Madol, it is time that digital spatial datasets start to add to the years of traditional survey work that has already been published. The lack of published digital data has consequences. Over the past several years, efforts to place Nan Madol on the

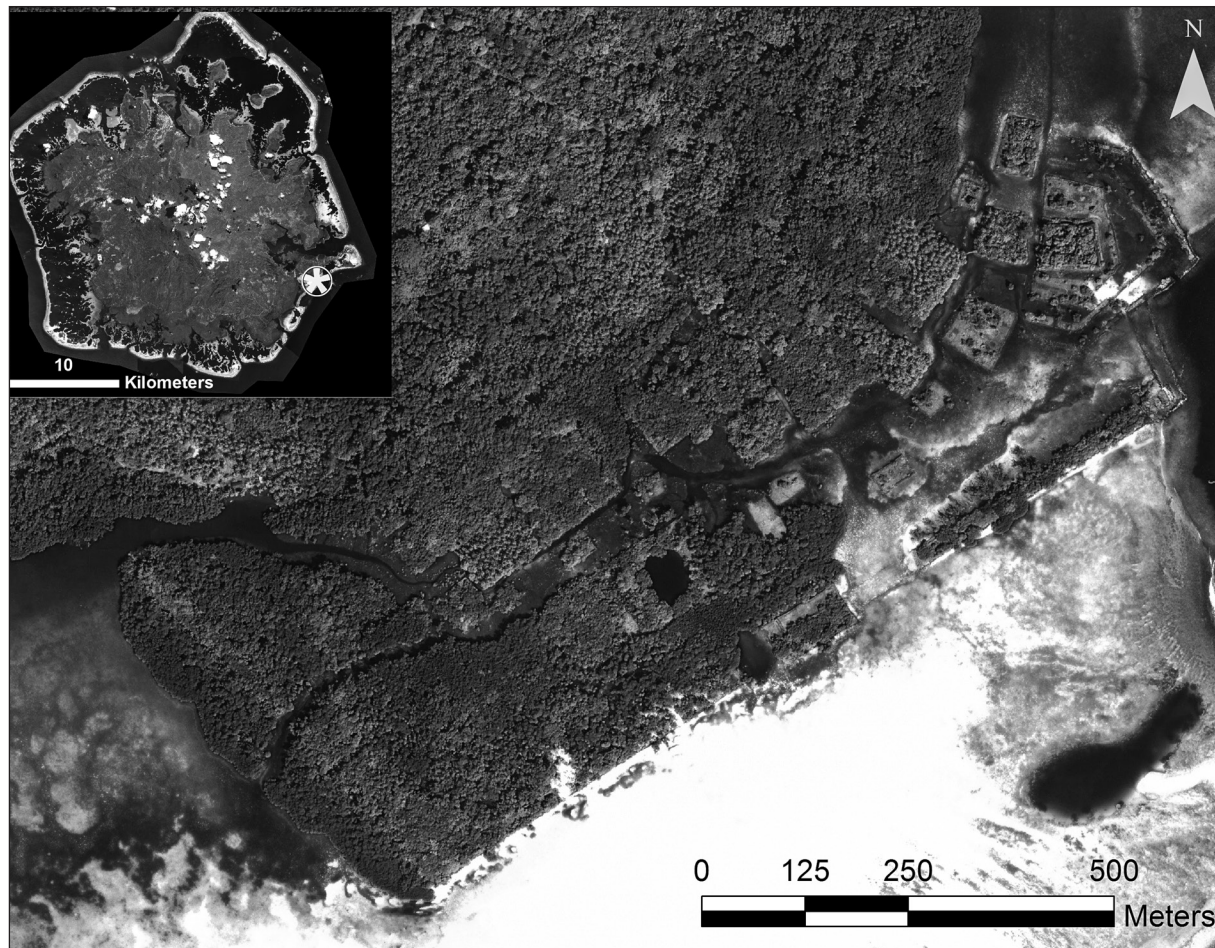


Figure 1. Satellite image of Nan Madol, Pohnpei. Note that while the outline of some islets can be clearly seen, the continuous mangrove that extends from the coast of Temwen Island makes it difficult to discern most features.

United Nation's World Heritage list (UNESCO) have failed in part due to the lack of an up-to-date map and an inventory of the islets.

The purpose of the following report is to present the results of a recent GPS survey of Nan Madol's iconic artificial islets and breakwater walls to contribute to ongoing efforts to protect the site and foster research by clarifying some ambiguities that have accumulated over a century of previous research. The resulting GIS data derived from this survey was created based on current standards of archaeological applications of spatial technology and is available on the Digital Archaeological Record, (tDAR) website.

## Background

Written descriptions of Pohnpei's monumental site of Nan Madol were made by visitors sporadically throughout the 19th century (Gulick 1859; Kubary 1874), with notable early surveying by F.W. Christian (1899) and P. Hambruch (1936). From the start, architectural details were described alongside place names and histories of specific locations. The most

complete map we have from this era is the result of survey conducted by Hambruch from 15 August to 26 August 1910 (Hambruch 1936). On the final version of his map he uses a numbering key (1 to 130), which has been helpful in reporting the results of new research (e.g., in McCoy & Athens (2012) the islet of Nan Dawas is #113, and in Alderson (2013) it is referred to as H-113). He noted that there were two traditional precincts, the administrative precinct of Madol Pah, located on the southwest half of the site, and the religious precinct of Madol Powe, where one finds massive *lolong* style burials on top of islets as well as smaller islets said to be used as residences for priests.

Hambruch's map continues to be frequently used by researchers today, not just for its completeness, but for the myriad of information it holds with regard to indigenous traditions (Athens 1984:133, 1990:19, 2007:193; Ayres et al. 1983:22; Kirch 2002:198; McCoy & Athens 2012:106; Morgan 1988:66-67; Panholzer & Mauricio 2003:110-111). The spellings used in publications have however varied from the original map, but an updated and standardized list has been published by Panholzer and Mauricio (2003:110-



113). Further, some islets recorded as a single islet are in fact two islets (Morgan 1988:63, citing survey information from Athens), and it has been noted that some smaller islets may have been missed altogether (Ayres 1989:6). Thus, there is a great deal of ambiguity as to which names refer to islets and, unsurprisingly, if one searches the literatures the total number of islets reported varies as well.

A number of islets have been studied in detail by archaeologists (Athens 1980b; Ayres et al. 1983; Thompson in prep.), but to date, there has been no systematic archaeological survey of the entire site using global positioning (GPS). This is not to say that there have not been summaries and reconstructions published since Hambruch. Morgan (1988), for example, gives the reader a beautifully rendered overall map as well as technical drawings of architecture. Ayres (1993) created a computer aided drawing (CAD) that includes architecture on top islets. More recently, Seikel (2011:Figure 4) has digitized previously unpublished maps to create GIS layers representing several islets and appears to have done the same for a map of the site as a whole (Seikel 2011:Figure 3).

## Methods

We surveyed the entirety of Nan Madol over a roughly six week period from 3 November to 20 December 2012 using a Trimble GeoXT 6000 Series GPS (Figures 2 & 3). This work represents collaboration between a visiting research team from the University of Otago (McCoy, Alderson) and the Pohnpei Historic Preservation Office (Thompson), with the support of the Nahnmwarki en Wein Madolenihmw Wasalalalap Isipahu Kerpet Hebel, Orren Maka Masao Silbanuz, and with direct field assistance from Satel Floyd Silbanuz, as well as University of Otago volunteers Maria Codlin and Jeremy Moyle. Survey was not continuous over this period due to other research activities and weather conditions.

Since walking continuous features (lines, polygons) was not feasible given the overgrowth, we opted to use the GPS point function to record 640 key locations in the plan view to outline islets and walls built as part of the outer breakwater. These were typically corners which were later assembled into a single GIS layer where islets and walls are represented as polygons.



Figure 2. Nan Madol's artificial islets and breakwater walls. Clockwise from top left, examples of a canal, a path on top of an islet, and the outer face of the massive enclosing wall that rings Nan Dawas (H-113); a typical edge of an islet faced with columnar basalt stacked in the header-and-stretcher style; boulders aligned to create a breakwater wall; two parallel breakwater walls at Pahn Mwasangapw (H-128).

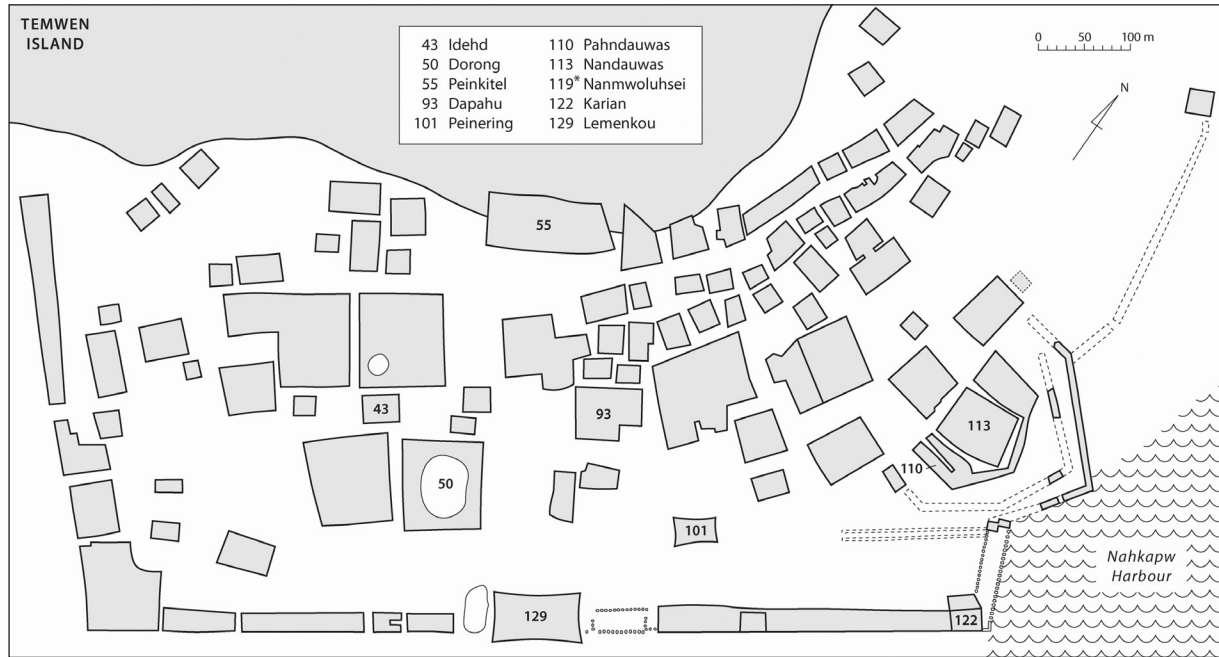


Figure 3. Example of one of the many maps derived from Hambruch's (1936) map (from McCoy & Athens 2012).

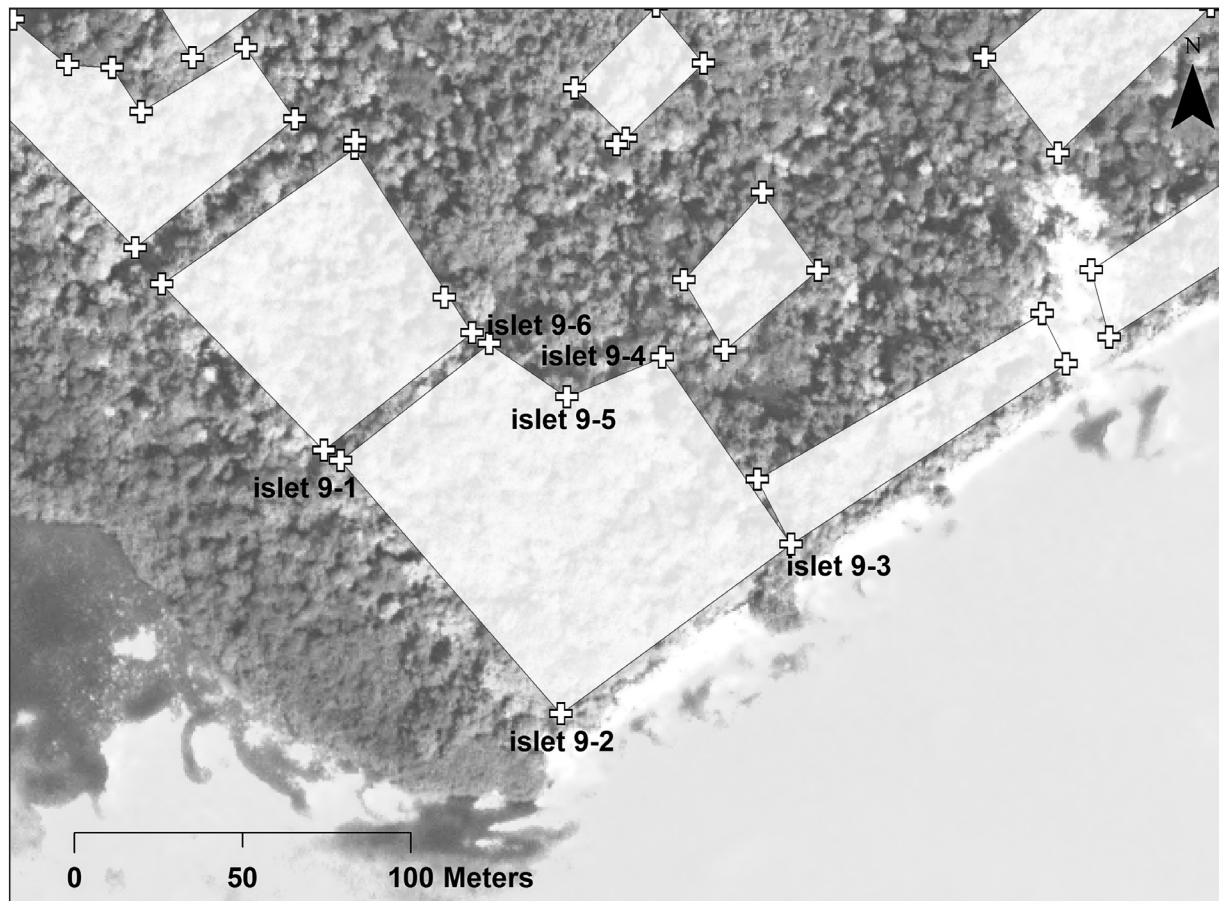


Figure 4. Examples of raw GPS points used to create GIS polygons layer of islets and breakwater walls. Points are labeled with comments recorded in the field.



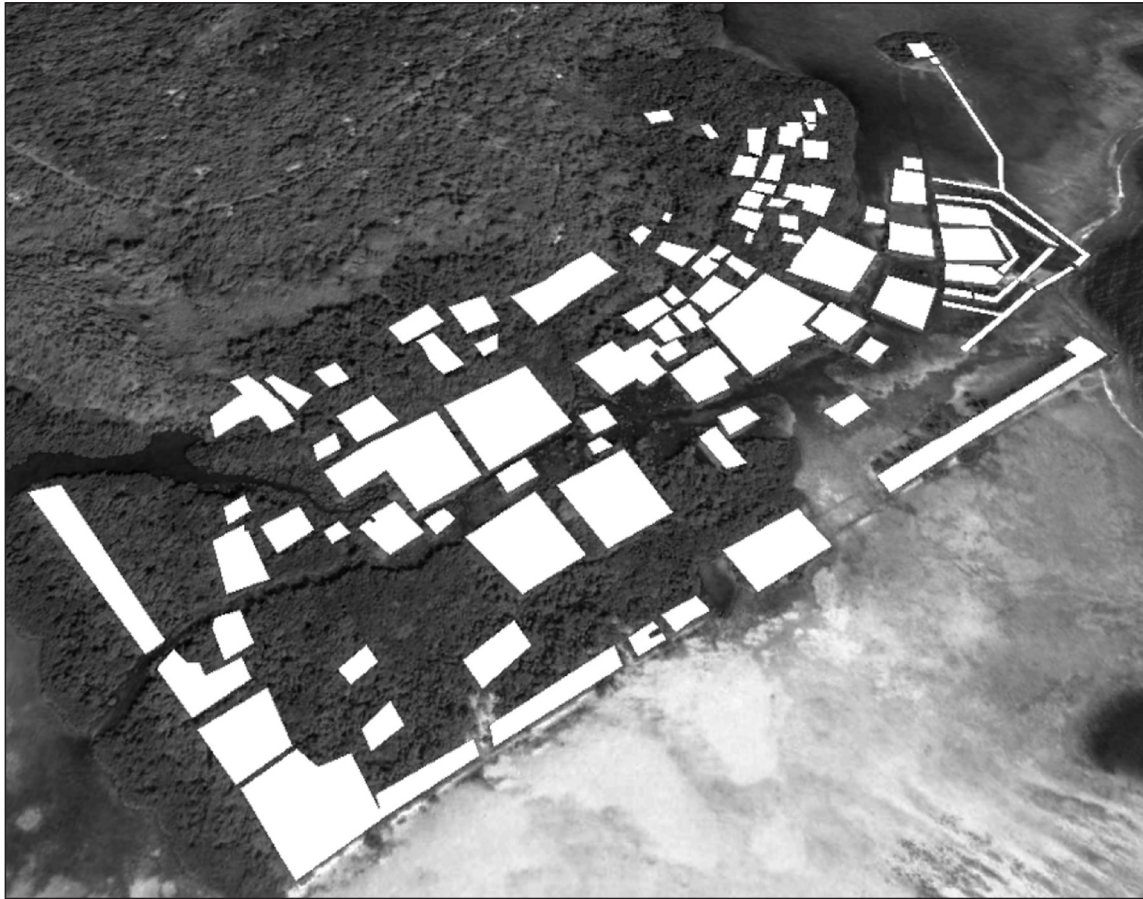


Figure 5. This image is derived from the .kml version of the GIS layer viewed from an oblique angle in Google Earth.

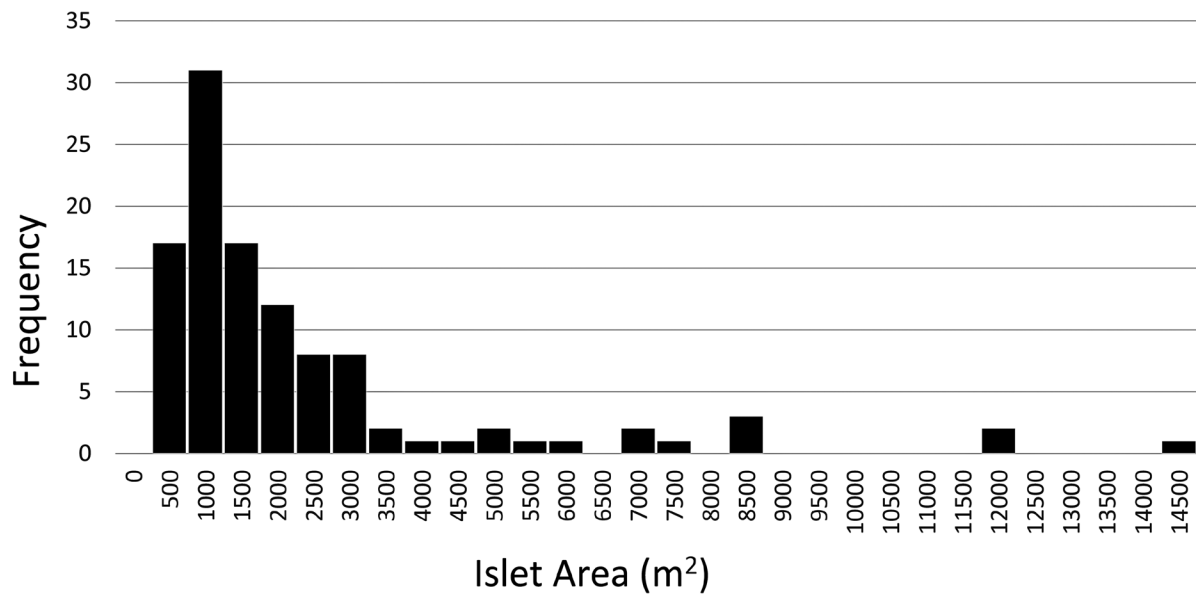


Figure 6. Area of Islets (m<sup>2</sup>). This histogram derived from GPS survey data is consistent with a similar chart by Bath & Athens (1990:Figure 2) calculated based on Hambruch's survey.

In all, we were able to distinguish the footprint of all islets reported by Hambruch, other islets noted by later surveyors, and breakwater walls along the northeastern edge of the site. We also note that there are complex islets, especially along the breakwater, that had to be simplified for consistency. The final GIS layer has a number of fields in it that reflect simple distinctions between features (see Appendix A). GPS data was not differentially corrected.

To give future researchers the ability to use this layer with legacy publications where place names are given as alternative spellings, and to present a brief summary of some of the traditions associated with each islet, we include here a summary that gives some qualitative information to accompany the digital dataset (see Appendix B). This is not a complete account, but an index.

## Results

Before we present the results of the survey, we want to make it clear that this layer reflects our best effort to represent Nan Madol as we found it in 2012 and using a GIS polygon data model. As Dunnell (1992) and others noted many years ago, what we observe in the field as an archaeological “site” will change in form and composition depending upon natural conditions and the classification decisions we make in the field. The snapshot that we present here does not negate the value of previous surveys, which this is built upon, or the value of future surveys that will no doubt change and refine our findings.

In this map we used 98 polygons to represent islets and 12 polygons to represent breakwater walls (Figure 5). We note that some adjacent islets share a side but have separate names (e.g., Paseid, H-103 and Usen Dau, H-104) and there are two small islets not represented on Hambruch’s map near Pehi en Kitel (H-55) (see Ayres 1989:6), plus a low islet near Kenderek (H-115) that is on Hambruch’s map but is not named. The walls used as breakwaters add another layer of complexity as some are large enough to have been used as islets, and there are many islets that doubled as part of the breakwater. Further, it is certainly possible to conclude that some islets should be given a different name, or should not be split into their own polygon as independent islets. For example, our recording of the islets of Likinpei (H-88), Sapwohng (H-85), and Usen Pehi (H-84) vary from other modern surveys.

With the above caveats, the GIS layer gives us the ability to easily generate new quantitative data with regards to islets and the complex as a whole. For example, Bath & Athens (1990:Figure 2) presented a histogram breakdown of islet size (m<sup>2</sup>) based on Hambruch’s (1936) survey. When we repeated that same summary we found broadly similar results

(Figure 6). We further note that there appear to be three general size categories: small islets sized between 170 and 1,500m<sup>2</sup>, medium-sized islets from 1,500m<sup>2</sup> to 3,000m<sup>2</sup>, and large islets that run from 3,000m<sup>2</sup> to the largest at over 14,000m<sup>2</sup>. We note that the religious sector has many of the smaller islets, and thus accounts for 65% of the total by count, but when the precincts are compared based on total area, they are close to even.

## Future Directions

By sharing the results of archaeological survey, especially in an accessible format like Google Earth (.kml) or ArcGIS by ESRI (.shp), we have the opportunity to reach a wide range of people with an interest in the region’s history. But, it is also important to keep in mind that the focus here has been on defining only Nan Madol’s islets and breakwater walls in two dimensions. Further study is necessary to inventory the height above sea level, composition, and condition of these features. This information is especially critical as Nan Madol is more vulnerable to the effects of storms, tsunami, and sea level rises than perhaps any other archaeological site in Oceania. We also expect future research will no doubt turn up details not shown here as well as correct errors of interpretation. But, it was not our intention to create the last map of Nan Madol. We will judge this exercise as a success more for its utility as a starting point for research than as a static authoritative account of a significant place in the history of Micronesia.

## Acknowledgements

We would like to thank the National Geographic Society and the Pohnpei Historic Preservation Office for their support, and once again thank and recognize the Nahnmwarki en Wein Madolenihmw Wasalapalap Isipahu Kerpet Hebel, Orren Maka Masao Silbanuz, and Satel Floyd Silbanuz, as well as field volunteers Maria Codlin and Jeremy Moyle. Special thanks to Heather Sadler for key technical support.

## References

- Alderson, H.A. 2013. The Political Economy of Monumental Architecture at Nan Madol, Pohnpei, Federated States of Micronesia. Unpublished MA Thesis, University of Otago.
- Athens, J.S. 1980a. Pottery from Nan Madol, Ponape, Eastern Caroline Islands. *The Journal of the Polynesian Society* 89(1):95-99.
- 1980b. *Archaeological Investigations at Nan Madol – Islet Maps and Surface Artifacts*. Guam: Pacific Studies Institute.
- 1983. The megalithic ruins of Nan Madol. *Natural History* 92(12):50-61.

- 1984. Surface artefact distributions at the Nan Madol Site: A preliminary assessment of spatial patterning. *New Zealand Journal of Archaeology* 6:129-153.
- 1990. Nan Madol pottery, Pohnpei. Recent advances in Micronesian Archaeology. *Micronesica* Supplement 2: 17-32.
- 2007. The rise of the Saudeleur: Dating the Nan Madol chiefdom, Pohnpei. In *Vastly Ingenious – The Archaeology of Pacific Material Culture in Honour of Janet M. Davidson*. Anderson, A., Green, K., Leach, F. (eds.):191-208. Dunedin: Otago University Press.
- Ayres, W.S. 1979. Archaeological Survey in Micronesia. *Current Anthropology* 20(3):598-600.
- 1985. The Archaeology of Nan Madol, Ponape, Micronesia (Eastern Caroline Islands). Report submitted to the National Geographic Society. Washington, D.C.
- 1989. Nan Madol Archaeological Fieldwork 1988 Interim Report. Pohnpei, Federated States of Micronesia.
- 1990. Pohnpei's position in Eastern Micronesian prehistory. *Micronesica* Supplement 2:187-212.
- 1992. New research at Nan Madol, Micronesia. *Society of American Archaeology Bulletin* 10(5):4-5.
- 1993. Nan Madol Archaeological Fieldwork: Final Report. Pohnpei State Historic Preservation Office, Federated States of Micronesia.
- 2002. Island Archaeology and Issues of Political Centralization: Micronesian Evidence. *BAR International Series* 1095:57-67.
- Ayres, W.S., G.G. Goles, & F.R. Beardsley 1997. Provenance study of lithic materials in Micronesia. In *Prehistoric Long-Distance Interaction in Oceania: An Interdisciplinary Approach*. M.I. Weisler (ed.):53-67, Auckland: New Zealand Archaeological Association.
- Ayres, W.S., A.E. Haun, & C. Severance. 1981. *Ponape Archaeological Survey: 1978*. Research Micronesian Archaeological Survey, H. P. O., Office of the High Commissioner, Trust Territory of the Pacific Islands, 4.
- Ayres, W.S., A.E. Haun, & R. Mauricio. 1983. *Nan Madol Archaeology: 1981 Survey and Excavations*. The Pacific Studies Institute, Guam to the Historic Preservation Committee, Ponape State, Federated States of Micronesia and the Historic Preservation Program. Trust Territory Report, Saipan.
- Bath, J.E. & J.S. Athens. 1990. Prehistoric social complexity on Pohnpei: The Saudeleur to Nahnmwarki transformation. *Micronesica* Supplement 2: 275-290.
- Bernart, L. 1977. (Translated by J.L. Fischer, S.H. Riesenberg & M.G. Whiting). *The Book of Luellen*. Canberra: Australian National University Press..
- Chatan, R. 2003. The Governor's vale levu: Architecture and hybridity at Nasova House, Levuka, Fiji Islands. *International Journal of Historical Archaeology* 7(4):267-292.
- Christian, F.W. 1899. *The Caroline Islands*. London: Methuen & Co.
- Clark, G., D. Burley, & T. Murray. 2008. Monumentality and the development of the Tongan maritime chiefdom. *Antiquity* 82:994-1008.
- Dunnell, R.C. 1992. The notion site. In *Space, Time, and Archaeological Landscapes*, J. Rossignol, & L. Wandsnider (eds.):21-41, New York: Plenum Press.
- Gulick, L.H. 1859. Micronesia. The ruins on Ponape, or Ascension Island. *Journal of the American Geographical and Statistical Society* 1(5):129-137.
- Hadley, M. 1981. Nan Madol: Spaces on the Reef of Heaven. Manuscript translated and edited by P.M. Ehrlich. Unpublished manuscript on file with the authors.
- Hambruch, P. 1936. (ed. Thilenius, G.) (Translated by R.E. Runeborg, & E.A. Murphy) *Ponape: die Ruinen. Ergebnisse der Sudsee-Expedition 1908-1910*. Series IIB, vol. 7, sub vol. 3. Hamburg: Friederichsen, De Gruyter.
- Hanlon, D. 1988. *Upon a Stone Altar: A History of the Island of Pohnpei to 1890*. Honolulu: University of Hawai'i Press.
- Hommon, R. 2013. *The Ancient Hawaiian State: Origins of a Political Society*. Oxford University Press, New York.
- Kirch, P.V. 2002. *On the Road of the Winds - An Archaeological History of the Pacific Islands Before European Contact*. Berkeley: University of California Press.
- 2010. *How Chiefs Became Kings: Divine Kingship and the Rise of Archaic States in Ancient Hawai'i*. Berkeley: University of California Press.
- Kolb, M.J. 2012. The genesis of monuments in island societies. In: *The Comparative Archaeology of Complex Societies*, M.E. Smith. (ed):138-164. New York: Cambridge University Press.
- Kubary, J.S. 1874. The Ruinen von Nanmatal auf der Insel Ponape (Ascension). *Journal des Museums Godeffroy*. 3:123-131.
- Mauricio, R. 1993. Ideological Bases for Power and Leadership on Pohnpei, Micronesia: Perspectives from Archaeology and Oral Tradition. Unpublished PhD Thesis, University of Oregon.
- McCoy, M.D. & J.S. Athens. 2012. Sourcing the megalithic stones of Nan Madol: an XRF study of architectural basalt stone from Pohnpei, Federated States of Micronesia. *Journal of Pacific Archaeology*. 3(1): 105-114.
- McCoy, M.D., & T.N. Ladefoged. 2009. New developments in the use of spatial technology in archaeology. *Journal of Archaeological Research* 17(3), 263-295.
- Morgan, W.N. 1988. *Prehistoric Architecture in Micronesia*. Austin: University of Texas Press.
- Panholzer, T. & R. Mauricio. 2003. *Place Names of Pohnpei Island: Including And (Ant) and Pakin Atolls*. Honolulu: Bess Press.
- Rainbird, P. 1999. Entangled biographies: Western Pacific ceramics and the tombs of Pohnpei. *World Archaeology*. 31(2):214-224.
- 2004. *The Archaeology of Micronesia*. Cambridge: Cambridge University Press.
- Riesenberg, S. H., Clifford E., & Meggers, B.J. 1963. Radiocarbon – Ponape Series. *American Journal of Sciences* 7:253-4.
- Seikel, K. 2011. Mortuary contexts and social structure at Nan Madol, Pohnpei. *The Journal of Island and Coastal Archaeology* 6(3):442-460.
- Thompson, A. *in prep*. An Inventory of the 94 Islets of Nan Madol. Appendix to the World Heritage nomination of The Ceremonial Centers of the Eastern Caroline Islands.

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— Appendix A starts over page.

## Appendix A. Metadata for GIS Layer.

**File Name:** Nan\_Madol\_McCoy\_et\_al\_2015.kml or Nan\_Madol\_McCoy\_et\_al\_2015.shp

**Date:** 12 September 2014

**Authors:** Mark D. McCoy, Helen A. Alderson, and Adam Thompson

**Contact Information:** mdmccoy@smu.edu

**Brief Description:** This polygon layer representing artificial islets and breakwater walls was created in ArcGIS 10.1 based on GPS points taken at the archaeological site of Nan Madol, Pohnpei, Federated States of Micronesia.

**Projected Coordinate System:** WGS\_1984\_UTM\_Zone\_57N

**Geographic Coordinate System:** GCS\_WGS\_1984

**Datum:** D\_WGS\_1984

**Fields:** The fields used include: “Name” is the feature’s name as listed by Panholzer & Mauricio (2003) (e.g., Pahn Kedira); “Comments” with regard to individual features; “Area\_m2” the surface area of each polygon (m<sup>2</sup>); “Precinct” referring to the two traditional sections of the site, Madol Pah and Madol Powe; “Form” details if polygon is representing an islet or wall; “Breakwater” lists a “Y” (yes) if the feature is part of the site’s outer breakwater; “H\_Id” referring to the identification number from Hambruch’s (1936) map of the site.

## Appendix B. Islets of Nan Madol.

| Site # | Name       | Description  | Known uses                    | Alternate name(s)   |
|--------|------------|--|-------------------------------|---|
| H-5    | Pohn Keimw | Place name means “above the corner” (Hambruch 1936:23-I).  |                               | Pon-Kaim (Christian 1899), pōn kaim (Hambruch 1936), Ponkaim (Bernart 1977; Morgan 1988), Pohnkeimw (Ayes et al. 1981; Ayres et al. 1983; Hanlon 1988; Ayres 1993), Pohnkeimwpaiei (Ayes et al. 1981; Hanlon 1988; Panholzer & Mauricio 2003) |
| H-7    | Pahnweid   | Place name means “below the passage” (Hambruch 1936:23-I).   |                               | pan müéit (Hambruch 1936), Panmuek (Bernart 1977), Panmueit (Bernart 1977, Morgan 1988)   |
| H-8    | Mweid      | Place name means “passage” (Hambruch 1936:23-I).   |                               | müéit (Hambruch 1936), Mweidalap (Ayes et al. 1981; Hanlon 1988) (– note that if islet known as Mweidalap, then it shares its name with H-15), Mueit (Morgan 1988)  |
| H-9    | Pahnwi A   | Traditions refer to priests having been buried on this islet (Hadley 1981:111). They also refer to a woman called Likonpahnwi who lived on Pahnwi (Hadley 1981:111). She was the overseer of the Takai en Rihp Kapéhd, or the Rock for Tightening Stomach, an overhung rock formation that women traversed to ensure them a perfect child (Hadley 1981:111). Archaeological survey and excavations have uncovered burial ( <i>lolong</i> style, and others), house platforms, midden, and a range of pottery and shell artefacts (Ayes 1985:19-33; Morgan 1988:77-78; Seikel 2011:452). One platform is reported to be the highest at Nan Madol (Morgan 1988:77-78). The islet’s south corner is remarkably high and is made up of both large boulders and stacked columnar basalt (Morgan 1988:78). | residential, mortuary, ritual | Panui (Christian 1899), pān ūi (Hambruch 1936), Pan ui (Athens 1980b)   |
| H-10   | Pahnwi B   |  |                               | pān ūi (Hambruch 1936)  |
| H-12   | Kapinet    | Kapinet is the traditional home of women from the Dipwinwai (foreign) clan, who, according to traditions, made sails (Hadley 1981:113). It is reported to have least three house foundations and two stone enclosures (Hadley 1981:113; Panholzer & Mauricio 2003:28).   | residential                   | Kapuned (Kubary 1874); Kapinet (Christian 1899); kap en not (Hambruch 1936), Kepinedh (Ayes et al. 1981; Ayres et al. 1983; Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003), Kapennot (Morgan 1988)                                       |



| Site # | Name       | Description   | Known uses                   | Alternate name(s)   |
|--------|------------|---|------------------------------|---|
| H-14   | Pikalap    | On the sandbank of this islet, the hero Isohkelekel landed from the island Kosrae (Hambruch 1936:13-I). Only the foundations of the islet remain (Hambruch 1936:21-I).  |                              | Nanpulak (Kubary 1874); pik a lap (Hambruch 1936), Pikalap (Morgan 1988)                                      |
| H-16   | Lemensei   | A <i>lolong</i> style crypt has been reported to have been built in a courtyard on this islet (Hambruch 1936:21-I; Seikel 2011:449).  | mortuary                     | lem en sei (Hambruch 1936), Lem en Sei (Athens 1980b), Lemensai (Ayres et al. 1981; Hanlon 1988; Seikel 2011) |
| H-17   | Peinmet    | A ceremonial house lies on this islet where Nahlapenien was crowned as the first <i>nahnken</i> (a type of high chief), and would later become the first Nahnmwarki en Wein Uh, High Chief of the municipality of Uh (Hadley 1981:68-71). The addition of the <i>nahnken</i> and other titles represented the major transformations from the <i>saudeleur</i> to the <i>nahnmwarki</i> title system associated with the takeover by Isohkelekel (Bath & Athens 1990). | ceremonial                   | péi en mêt (Hambruch 1936)  |
| H-18   | Likinsau   |   |                              | li kin šau (Hambruch 1936), Likinsou (Ayres et al. 1981; Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003)  |
| H-19   | Sapwei     | Traditionally the residence of a paramount head of a clan (Hambruch 1936:29-I). It is here that the Pohnpeian hero Tip en uei committed suicide to escape further punishments from the <i>saudeleur</i> (Hambruch 1936:29-I).   | residential                  | tšap ũei (Hambruch 1936), Sapwei (Ayres et al. 1981; Hanlon 1988; Ayres 1993), Sapuei (Morgan 1988)           |
| H-20   | Sapwenleng | Name reportedly means “place of the sky” (Hambruch 1936:30-I).  |                              | tšap ũ en lăn (Hambruch 1936), Sapenlan (Morgan 1988)   |
| H-21   | Pedenleng  | Name reportedly means “stone of the sky” (Hambruch 1936:30-I).  |                              | bat en lăn (Hambruch 1936), Batenlan (Morgan 1988)  |
| H-22   | Pilenleng  | Name reportedly means “water of the sky” (Hambruch 1936:30-I).  |                              | pil en lăn (Hambruch 1936), Pilenlan (Morgan 1988)  |
| H-23   | Pahndipap  | Previous archaeological studies have speculated that stones were removed from this islet for re-use elsewhere (Ayres 1989:7; Ayres 1993:28). Nonetheless, considerable pottery, four platforms, and a <i>lolong</i> style crypt have been noted (Ayres 1989:7; 1993:24, 28; Seikel 2011:449, 452). Name reportedly means “under the Terminalia tree” (Hambruch 1936:30-I).  | mortuary                     | Pan-Tipap (Christian 1899), pān ti bob (Hambruch 1936), Pantibob (Morgan 1988)                                |
| H-24   | Pedeped    |   |                              | betebete (Hambruch 1936), Betebete (Morgan 1988)  |
| H-25   | Peinpwe    |   |                              | péi en apŭe (Hambruch 1936), Peienapue (Morgan 1988)  |
| H-26   | Nihkonok   |   |                              | ni konok (Hambruch 1936), Nikonok (Morgan 1988; Ayres 1985)   |
| H-27   | Reilap     | This islet has a residential structure that is bordered by high walls and divided in two by a low wall (Hambruch 1936:29-I). Another house foundation is referred to as Uasau (“that place”), as people were tortured there (Hadley 1981:109). A burial is also present (Seikel 2011:449).  | residential, torture, burial | réi lap (Hambruch 1936)   |
| H-28   | Dolewe     |   |                              | lōle ēŭe (Hambruch 1936), Loleeue (Morgan 1988)   |

| Site # | Name          | Description  | Known uses  | Alternate name(s)  |
|--------|---------------|--|---|--|
| H-29   | Peilam        |  |   | péi iañ (Hambruch 1936), Peiniang (Ayres et al. 1981; Ayres et al. 1983; Ayres 1985; Hanlon 1988), Peian (Morgan 1988)   |
| H-30   | Reitik        | Traditions refer to executions having taken place at a house, where a large platform is found today (Panholzer & Mauricio 2003:91). An additional residential complex made up of platforms has been reported, as well as the presence of a stone adze (Ayres 1990:191; 1993:24).   | execution, residential  | réi tik (Hambruch 1936), Rei Tik (Athens 1980b)  |
| H-31   | Uasau         | Traditions refer to executions having taken place on this islet (Hadley 1981:109). It is reported that the islet was originally called Reilap, but became known as Uasau (“that place”) (Hadley 1981:109). A house foundation, a burial feature, midden, shell artefacts, and many potsherds have been reported (Ayres 1985:35-38; Seikel 2011:449).   | execution, residential  | Uachau (Christian 1899); ūa šaū (Hambruch 1936), Uajao (Bernart 1977), Ua Sau (Athens 1980a, 1980b), Wasahu (Ayres et al. 1983), Wasau (Hadley 1981:109; Ayres et al. 1981; Ayres 1985, 1990; 1993; Rainbird 2004; Seikel 2011), Wasaw (Hanlon 1988), Wasao (Panholzer & Mauricio 2003).   |
| H-32   | Kelepwel      | Traditions suggest that the <i>saudeleur</i> stored canoes here, and that it was here that Isohkelekel and his warriors stayed while guests of the <i>saudeleur</i> (Hambruch 1936:27-I; Bernart 1977:74; Hadley 1981:113; Hanlon 1988:19). It is also where a game involving stones thrown into holes was played (Hadley 1981:113). Although most of this islet is relatively low, its northern corner has a large residential area that is separated by walls over two meters high (Morgan 1988:76). A variety of other platforms have been reported, and the islet may have been occupied in the historic period (Hadley 1981:113; Ayres 1985:33-35; 1989:6).   | residential, canoe storage, ceremonial meeting                    | kal a püel (Hambruch 1936), Kelepuall (Bernart 1977), Kal a Puel (Athens 1980b), Kalapuel (Morgan 1988)  |
| H-33   | Pahn Kedira   | This is a large islet with distinctive high header-and-stretcher walls with a detailed history of construction in traditions. When work began, the four corners of the islet were made by four different groups of people, those from the <i>wehi</i> (municipalities) of Sokehs, Kitti and Madolenihmw, and the island Kosrae (Bernart 1977:141; Hadley 1981:9, 105). If one corner were to fall, so would that group of people (Bernart 1977:29-30; Hadley 1981:9, 105). This islet was the residence of the <i>saudeleur</i> , his family, and his servants, with enclosures for each; the <i>saudeleur</i> 's wives had a separate annex (Hadley 1981:107; Ayres et al. 1983:52; Morgan 1988:75). It also housed the temple of the thunder god Nahnsapwe or the spirit Nan Kieil Mwahu on a stepped central platform (Hambruch 1936:24-I; Ayres et al. 1983:15, 33; Morgan 1988:60). Prisoners were tortured here on a stone wall (Hadley 1981:107; Ayres et al. 1983:48). The <i>saudeleur</i> also had sections for bathing, as well as growing and storing crops (Hadley 1981:107; Ayres et al. 1983:48). | residential, ritual, religious, torture, food production, bathing | Nangutra (Kubary 1874), Pan-Katara (Christian 1899), Pan-Gothra (Christian 1899), pān katera (Hambruch 1936), Pan Kedira (Riesenberg et al. 1963), Pankatira (Bernart 1977), Pan Katera (Athens 1980b), Pahnkadira (Ayres et al. 1981; Athens 1983, 1984; Hanlon 1988; Morgan 1988; Panholzer & Mauricio 2003; Athens 2007), Pahn Kadira (Ayres et al. 1983; Ayres 1985; 1989; 1990; 1993; Hanlon 1988; Rainbird 2004), Pahnkedira (Bath & Athens 1990; Kolb 2012) |
| H-38   | Pehi en Mweik | Pehi en Mweik is a small square islet next to Pahn Kedira (H-33). It has two house foundations: one is large and elevated with a fire pit, the other small (Hadley 1981:111; Ayres 1985:15).   | residential   | Pein Maik (Christian 1899); péi en müéik (Hambruch 1936), Pei en Mueik (Athens 1980b), Pein Mweik (Ayres et al. 1983), Peinmwek (Ayres et al. 1983; Hanlon 1988); Peienmueik (Morgan 1988), Peinmwehk (Ayres 1985; Ayres 1993)   |

| Site # | Name     | Description   | Known uses  | Alternate name(s)  |
|--------|----------|---|---|--|
| H-39   | Peikapw  | This islet was the residence for the highest ranking priests during rituals that were performed at Idehd (H-43), and some traditions state that the hero Isohkekel's body is buried here (Hadley 1981:65, 93, 103). Four <i>lolong</i> style burials have been reported (Seikel 2011:449). The islet has four sacred pools including Namweias, where turtles were kept, and Peirot, a magical pool where any place in the world could be seen (Bernart 1977:169; Hadley 1981:103). It also had a platform for dancing women (Hadley 1981:103).  | mortuary, ritual, residential, magic                  | Pei kap (Kubary 1874), Pei-Kap (Christian 1899), péi káp (Hambruch 1936), Peikap (Bernart 1977; Hadley 1981; Morgan 1988), Pei Kap (Athens 1980b), Paikapw (Ayres et al. 1983), Pei Kapw (Ayres et al. 1983)   |
| H-43   | Idehd    | This small islet features prominently in the history of Nan Madol as the home of a sacred eel (Athens 2007:195, citing Hadley 1981:17-19). A ceremony conducted here was central to the legitimisation of <i>saudeleur</i> power (Hambruch 1936:28-I; Hadley 1981:65, 109; Athens 2007). The islet is also said to have been a weapons treasury; the sling-stones of the hero Isohkekel and his warriors are reported to remain there (Hambruch 1936:28-I; Hadley 1981:109). It has a single enclosure with header-and-stretcher walls, and a large coral rubble mound that is left-over from rituals (Athens 2007:199).  | ritual, treasury, residential                         | Itet (Kubary 1874; Christian 1899); Athens 1980a, 1980b), itet (Hambruch 1936), Iteet (Bernart 1977), Ideht (Bath & Athens 1990)   |
| H-44   | Peitaup  | This islet is reported to have been occupied in the early 20th century (Hambruch 1936:30-I).  | residential   | réi táüb (Hambruch 1936), Reitaub (Ayres et al. 1983; Morgan 1988)   |
| H-45   | Dekehtik | Dekehtik means "small island" (Panholzer & Mauricio 2003:8). This islet contains a house foundation (Hambruch 1936:30-I).   |   | take tík (Hambruch 1936), Dekehtik (Athens 1984), Taketik (Morgan 1988)  |
| H-46   | Pahnisou |   |   | pān išō (Hambruch 1936), Pahniso (Ayres et al. 1983; Hanlon 1988; Ayres 1993), Paniso (Morgan 1988)  |
| H-47   | Peinieir | This islet is reported to have house platforms (Ayres 1989:6).  | residential   | pen i éir (Hambruch 1936), Peinair (Ayres et al. 1983; Ayres 1985; 1989; 1993; Hanlon 1988)  |
| H-48   | Mand     |   |   | Mant (Christian 1899; Morgan 1988), mant (Hambruch 1936)   |
| H-49   | Palakapw | This islet was used as a residence by nobility and was also the site of Isohkekel's first new feasting house, as well as a stone burial vault (Hadley 1981:109; Hanlon 1988:22; Morgan 1988:77). The islet has several house foundations (Hambruch 1936:30-I, Hadley 1981:109).   | residential, mortuary, ceremonial meeting             | Pal-akap (Christian 1899), pēl a káp (Hambruch 1936), Palakap (Bernart 1977; Bath & Athens 1990), Pel Akapw (Hadley 1981), Pelakapw (Hanlon 1988)  |
| H-50   | Darong   | This large islet has relatively low retaining walls of header-and-stretcher construction that form a square around a large natural reef pool called Lehnkei (Hadley 1981:101; Ayres 1993:44-46). It was used for food production, including the raising and keeping of clams (Hambruch 1936:29-I; Hadley 1981:101). Clam ceremonies were performed here for the nobility, and today the islet is littered with clam shells (Hambruch 1936:29-I; Hadley 1981:101, Athens 1984:147). Traditions report tunnels let sea life in and out of Lehnkei, but today they are clogged with debris (Athens 1983:57, 1984:147). The islet also has the foundations of a meeting house ( <i>nahs</i> ), and burials are reported (Athens 1980b:34; Hadley 1981:101; Morgan 1988:77). | food production, mortuary, ritual, ceremonial meeting | Torong (Christian 1899); torōñ (Hambruch 1936), Toron (Athens 1980a, 1980b), Dorong (Ayres et al. 1983; Athens 1983, 1984; 2007; Ayres 1993; Hanlon 1988; Morgan 1988; Ayres 1993; Panholzer & Mauricio 2003; McCoy and Athens 2012), Derong (Panholzer & Mauricio 2003) |



| Site # | Name          | Description   | Known uses                              | Alternate name(s)  |
|--------|---------------|---|---|--|
| H-55   | Pehi en Kitel | This trapezoidal islet is unusual for its large enclosing wall and the fact that it was partially constructed on land (Hambruch 1936:11-12-I). Its massive external walls are built in an impressive header-and-stretcher style and have within them three <i>lolong</i> -style crypts (Seikel 2011:449). A large tomb was built against the north-western wall, which is remembered as the tomb of Isohkelekel, as well as some <i>saudeleur</i> and <i>nahnmwarki</i> (Hambruch 1936:31-32-I; Hadley 1981:65; 111). Two smaller tombs are located in the middle of the islet, and adjoining the south-eastern wall (Hadley 1981:111-3). The central enclosure is attributed to Nahnisen, and the eastern in some accounts is given as the legendary burial place of Olsihpa and Olsopha, the founders of Nan Madol (Hadley 1981:111-3). | mortuary, ritual                        | péi en pān kitel (Hambruch 1936), Pehi en Pan Kitel (Athens 1980b), Peinkitel (Ayes et al. 1983; Ayres 1985; Hanlon 1988; Morgan 1988; Rainbird 2004; McCoy & Athens 2012), Pein Kitel (Ayes 1989; 1993; Mauricio 1993; Seikel 2011) |
| H-57   | Peidoh        | This islet is reported as a priestly residence (Hambruch 1936:32-I), and the residence of the <i>nahnmwarki</i> Luhk en Peidoh (Hadley 1981:111; Panholzer and Mauricio 2003:72). Researchers conducting surveys have noted a number of features including house foundations, a meeting house ( <i>nahs</i> ) foundation, two enclosures, and a <i>sakau</i> (kava) stone (Hadley 1981:111; Ayres 1989:5-6).  | residential, ritual, ceremonial meeting | Peilo (Christian 1899); péi to (Hambruch 1936), Peitoo (Bernart 1977), Peito (Morgan 1988)   |
| H-58   | Pwilel        | Traditions suggest this islet the home of priests (Hambruch 1936:32-I). Surveys have reported two house foundations, a meeting house, and shell artefacts (Hambruch 1936:32-I; Ayres 1989:5; Ayres 1993:26). The name reportedly means “attention! Wall!” (Hambruch 1936:32-I).   | residential                             | pūilél (Hambruch 1936), Puilele (Morgan 1988)  |
| H-59   | Reidipap      | This islet was reportedly home to priests (Hambruch 1936:32-I). Its name reportedly means “to the Terminalia tree” (Hambruch 1936:32-I).  | residential                             | réitibob (Hambruch 1936), Reitipup (Bernart 1977), Reitibob (Morgan 1988)  |
| H-60   | Sapwereirei   | This islet was reportedly home to priests (Hambruch 1936:32-I). Its name reportedly means “the long place” (Hambruch 1936:32-I).  | residential                             | tšāp réiréi (Hambruch 1936), Sapreirei (Morgan 1988)   |
| H-61   | Peinmei       | This islet was reportedly home to priests (Hambruch 1936:32-I).   | residential                             | péi méi (Hambruch 1936), Peimei (Ayes et al. 1983; Morgan 1988); Peimwei (Ayes 1993)   |
| H-62   | Likindalok    | This islet was reportedly home to priests (Hambruch 1936:32-I).   | residential                             | liki tolok (Hambruch 1936), Likindaloke (Hanlon 1988), Likitolok (Morgan 1988)   |
| H-63   | Imwiniap      | This islet was reportedly home to priests (Hambruch 1936:32-I). Its name reportedly means “the large festival” (Hambruch 1936:32-I).  | residential                             | imūin a lap (Hambruch 1936), Imwinahlap (Hanlon 1988; Ayres 1993), Imuinalap (Morgan 1988)   |
| H-64   | Peinuht       | This islet was reportedly home to priests (Hambruch 1936:32-I). Its name reportedly means “worship place of the banana” (Hambruch 1936:32-I).   | residential                             | péi en üt (Hambruch 1936), Peienut (Morgan 1988)   |
| H-65   | Sapwenluhk    | This islet was reportedly home to priests (Hambruch 1936:32-I). Its name reportedly means “place of the Luhk” (Hambruch 1936:32-I).   | residential                             | tšāp en lūk (Hambruch 1936), Sapenluk (Morgan 1988)  |
| H-67   | Imwinmap      | This low-lying islet was reportedly a home for priests (Hambruch 1936:33-I).  | residential                             | imūin map (Hambruch 1936), Imuinmap (Bernart 1977), Imwinmah (Morgan 1988)   |
| H-68   | Map           | This low-lying islet was reportedly home for priests (Hambruch 1936:34-I).  | residential                             | map (Hambruch 1936), Pohnmah (Morgan 1988)   |

| Site # | Name            | Description  | Known uses                     | Alternate name(s)  |
|--------|-----------------|--|--------------------------------|--|
| H-69   | Sapwengei       | This low-lying islet has partially eroded external walls (Morgan 1988:62), and is remembered as the residence of priests (Hambruch 1936:34-I).   | residential                    | tšāp ueñāi (Hambruch 1936), Tip en ai (Hambruch 1936)  |
| H-70   | Sapwolos        | This low-lying islet has partially eroded external walls (Morgan 1988:62), and is remembered as the residence of priests (Hambruch 1936:33-I).   | residential                    | tšāp a loš (Hambruch 1936)   |
| H-71   | Ainiar          | This low-lying islet was reportedly a home for priests (Hambruch 1936:34-I).   | residential                    | āi ni ār (Hambruch 1936)   |
| H-72   | Sapwenpwe       | A great deal of pottery has been found on this rectangular islet (Athens 1990:22). It is an islet that is remembered as a residence of priests (Hambruch 1936:33-I), and a burial feature has been reported (Seikel 2011:449).                   | residential, mortuary          | tšāp ūen pūe (Hambruch 1936)   |
| H-73   | Peiniap         | This islet was reportedly home to priests (Hambruch 1936:33-I).  | residential                    | pēi ni āp (Hambruch 1936)  |
| H-74   | Sapwekapw       | This islet was reportedly home to priests (Hambruch 1936:33-I). Its name reportedly means “the new place” (Hambruch 1936:33-I).  | residential                    | tšāp a kap (Hambruch 1936), Sapwakapw (Hanlon 1988; Ayres 1993), Sapakap (Morgan 1988)   |
| H-75   | Sapwendau       | This islet was reportedly home to priests (Hambruch 1936:33-I). Its name reportedly means “the place on the channel” (Hambruch 1936:33-I).   | residential                    | tšāp en taū (Hambruch 1936), Sapentau (Morgan 1988)  |
| H-76   | Sapwuhitik      | This islet is low-lying and has partially eroded external walls (Morgan 1988:62). It is remembered as having been the residence of priests (Hambruch 1936:34-I).   | residential                    | tšāp ū tik (Hambruch 1936)   |
| H-77   | Sapwuhdir       | This islet is remembered as the residence of priests (Hambruch 1936:34-I).   | residential                    | tšāp a tūr (Hambruch 1936), Sepedir (Morgan 1988), Sapwudir (Ayres 1993)   |
| H-78   | Nihmokemok      | This low-lying islet was reportedly home to priests (Hambruch 1936:34-I).  | residential                    | ni mōgemōg (Hambruch 1936); Nihmokemoke (Ayres 1993)   |
| H-79   | Nihrik          | This low-lying islet was reportedly home to priests (Hambruch 1936:34-I).  | residential                    | ni rik (Hambruch 1936), Nirik (Morgan 1988)  |
| H-80   | Nihdor-Reidipap | This islet was reportedly home to priests (Hambruch 1936:33-I). One stone adze was found here (Ayres et al. 1983:167-168).   | residential                    | ni tōr (Hambruch 1936), Reidipap (Ayres et al. 1983), Nihdor (Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003), Nitor (Morgan 1988) |
| H-81   | Dauahdpeidak    | Traditions suggest this islet was home to priests, and survey reports pottery (Hambruch 1936:33-I; Ayres 1990:190; 1992:5; 1993:12). Survey also reports two stone platforms interpreted as a burial and house foundation (Ayres 1993:26).       | residential, possibly mortuary | Paupeikalema (Christian 1899); taū at pēitāk (Hambruch 1936), Jauatpeitak (Bernart 1977), Tauuipeitak (Morgan 1988)                    |
| H-82   | Pohn Dake       | This islet, which traditions suggest was the home of priests, has been interpreted as two low islets joined together to create a larger one (Hambruch 1936:34-I; Ayres 1993:26). Two small house foundations have been reported (Ayres 1993:26). | residential                    | pon tāke (Hambruch 1936), Pohndake (Hanlon 1988; Ayres 1993), Pontake (Morgan 1988)  |
| H-83   | Dauahdpeidi     | This islet, traditionally known as the home to priests, has several house platforms reported (Hambruch 1936:33-I; Ayres 1993:26).  | residential                    | taū at pēiti (Hambruch 1936), Jauatpaiti (Bernart 1977), Tau at peiti (Athens 1980a), Tauatpeiti (Morgan 1988)                         |
| H-84   | Usen Pehi       | This low-lying islet was home to priests (Hambruch 1936:33-I). The islet’s name reportedly means “name of the <i>pei</i> (altar)” (Hambruch 1936:33-I).  | residential                    | ūš en pēi (Hambruch 1936), Usenpei (Hanlon 1988; Morgan 1988, Ayres 1993)  |

| Site #     | Name                | Description   | Known uses                                       | Alternate name(s)   |
|------------|---------------------|---|--|---|
| H-85       | Sapwohng            | This low-lying islet was home to priests (Hambruch 1936:33-I).  | residential                                      | tšap oñ (Hambruch 1936), Tsap on (Athens 1980a), Sapon (Morgan 1988)  |
| H-86       | Sapwenpei           | This low-lying islet was home to priests (Ayres 1989:6; Ayres 1993:28; Hambruch 1936:33-I).   | residential                                      | tšap en péi (Hambruch 1936), Sapenpei (Morgan 1988)   |
| H-87       | Sakapeilong         | This low-lying islet was home to priests (Hambruch 1936:33-I).  | residential                                      | šak a péilon (Hambruch 1936), Sakakpeilong (Hanlon 1988; Panholzer & Mauricio 2003), Sakapeilon (Morgan 1988)   |
| H-88       | Likinpei A and B    | Originally mapped as a single islet (Hambruch 1936), this islet was later mapped as two separate islets by Stephen Athens (Morgan 1988:63, 66). This islet was home to priests (Hambruch 1936:33-I).  | mortuary, residential                            | lik in péi (Hambruch 1936)  |
| H-89       | Sakapes             | This low-lying islet was home to priests (Hambruch 1936:33-I). The name reportedly means “garbage pile” (Hambruch 1936:33-I).   | residential                                      | šak a peš (Hambruch 1936), Sakahpas (Hanlon 1988; Ayres 1993)   |
| H-90       | Parailap            | This low-lying islet was home to priests (Hambruch 1936:33-I).  | residential                                      | peréi lap (Hambruch 1936), Pereilap (Hanlon 1988; Morgan 1988; Ayres 1993)  |
| H-91       | Usenamw             | This islet is irregular in design – it is composed of three squares, and as such is known as “the star of the lagoon” (Hambruch 1936:33-I). These are a focal area and two slightly smaller ‘annexes’, respectively (Hambruch 1936:33-I). The islet was the ‘kitchen’ of the <i>saudeleur</i> , and later the <i>nahnmwarki</i> (Hambruch 1936:33-I). It has several house platforms, a large two-tiered meeting house ( <i>nahs</i> ) foundation, and pottery has also been found (Bath & Athens 1990:285; Morgan 1988:74).  | food production, ceremonial meeting, residential | uš en nām (Hambruch 1936), Usenamw (Ayres 1989; Ayres 1993); Us en Nam (Bath & Athens 1990).  |
| H-93       | Dapahu              | Traditions suggest canoes were built on this islet (Bernart 1977:139; Hadley 1981:103; Athens 1980b:57-58). At least two house platforms have been reported, as well as canoe landings, as a high density of <i>Tridacna adzes</i> , pottery, and an <i>uhmw</i> (oven) for cooking jellyfish (Athens 1980b:57-62; 1984:147; Hadley 1981:103).  | canoe manufacture, residential, ritual           | Tapau (Christian 1899; Athens 1980a, 1980b); tapau (Hambruch 1936),   |
| H-94       | Pahn Katau          | Unlike most islets at Nan Madol, no retaining wall is present today and coral fill simply terminates at the edge of the water (Morgan 1988:62). The islet has three tombs and is associated with worship (Hambruch 1936:34-I; Morgan 1988:62).  | mortuary, ritual                                 | Pan-ilel (Christian 1899); pan katau (Hambruch 1936), Pahnkatau (Ayres et al. 1983; Hanlon 1988; Morgan 1988; Ayres 1993)   |
| H-95       | Paraka Tuhke        | This low-lying islet is remembered as a place of worship (Hambruch 1936:34-I).  | ritual   | paraka tšūka (Hambruch 1936), Paraktuka (Ayres et al. 1983; Hanlon 1988), Paratuka (Morgan 1988), Paraktuhke (Ayres 1993)   |
| H-98; H-99 | Peilapalap; Rasalap | This large islet is referred to as Peilapalap (H-98) and Rasalap (H-99), with the former corresponding to the main islet, and the latter being a taboo place in the northwest corner (Hambruch 1936:34-I; Hadley 1981:115). Peilapalap’s shape is irregular, and its walls are particularly low, many under a meter tall, or absent altogether (Hambruch 1936:34-I). Features reported include a burial vault, house foundations, and an altar (Bernart 1977:38-39; Hadley 1981:115). The notable Pohnpeians Satokawai and his clanspeople lived on Peilapalap, as well as priests (Hadley 1981:93, 115). | residential, mortuary, ritual                    | Alternative names for Peilapalap include: péi lāpalāp (Hambruch 1936). Alternative names for Rasalap include: raš a lāp (Hambruch 1936), Rassalap (Panholzer & Mauricio 2003) |



| Site # | Name       | Description  | Known uses                              | Alternate name(s)  |
|--------|------------|--|---|--|
| H-100  | Pwulak     | This low islet was a place of worship, which included a house for an important spirit (Hambruch 1936:34-I; Hadley 1981:115; Ayres et al. 1983:20). A <i>sakau</i> (kava) stone is reported upon which <i>sakau</i> was prepared for the spirit (Hadley 1981:115).  | ritual                                  | Pulak (Kubary 1874; Christian 1899; Morgan 1988), pūlāk (Hambruch 1936), Pwilak (Ayres et al. 1983; Hanlon 1988; Ayres 1993)   |
| H-101  | Peinering  | This islet had a special ritual function, and was where coconut oil was made (Hadley 1981:97; Morgan 1988:74). A house platform has been reported, as well a central <i>lolong</i> style burial (Hadley 1981:97; Morgan 1988:74; Panholzer & Mauricio 2003:73; Seikel 2011:449). The islet's external header-and-stretcher walls are relatively small compared to others at Nan Madol (Athens 1980b:18). Nevertheless, these external walls are up to two meters thick in sections and have upswept corners (Athens 1980b:18; Morgan 1988:74).   | mortuary, domestic, ritual, residential | Pein-Aring (Christian 1899), péi en arūn (Hambruch 1936), Peinariñ (Bernart 1977), Pei en Arun (Athens 1980b)  |
| H-102  | Peinior    | This islet was used for a range of purposes, as a residence, burial, and ritual (Hambruch 1936:34-I; Morgan 1988:74; Seikel 2011:449). Traditions note this as a place where the women's seated dance ( <i>sapei</i> ) was performed (Hadley 1981:99; Panholzer & Mauricio 2003:73).   | ritual, residential, mortuary           | péi ni òr (Hambruch 1936), Panior (Bernart 1977), Peinioar (Hanlon 1988; Morgan 1988; Seikel 2011)   |
| H-103  | Pahseid    | This low-lying islet was used as an area to keep the turtles that were to be fed to an eel on Idehd (H-43) during an important ceremony (Hambruch 1936:35-I; Hadley 1981:115; Morgan 1988:76). It is joined to the islet Usen Dau (H-104); the two are separated by a wall that adjoins Usen Dau and abuts Pahseid (Ayres et al. 1983:64).   | ritual                                  | pāšēt (Hambruch 1936), Paset (Kubary 1874; Morgan 1988)  |
| H-104  | Usen Dau   | This islet was a priestly compound of a high priest, and the former residence of a <i>nahnmwarki</i> in the historic era (Hambruch 1936:24-I, 35-I). It is adjoined to the islet Pahseid (H-103) by a header and stretcher style wall. Sections of the external were razed and rebuilt in the historic period (Hambruch 1936:35-I). Several house platforms, a ceremonial house foundation ( <i>nahs</i> ), burials, and abundant pottery remains have been reported (Hadley 1981:75, 95; Ayres et al. 1983:64-77; Morgan 1988:74). Usen Dau was traditional part of a communication network of islets, with information arriving from Peikap Sapwawas (H-108), and being passed on to Pwallahng (H-106) (Hadley 1981:95; Morgan 1988:74). | residential, communication, mortuary    | Udzientau (Kubary 1874), Us en Tau (Kubary 1874), Uchentau (Christian 1899), ūš en taū (Hambruch 1936), Ujantau (Bernart 1977), Usen Dau (Hadley 1981), Usendau (Athens 1983, 1984; 2007; Ayres et al. 1983; Ayres 1985, 1990, 1993; Hanlon 1988; Morgan 1988), Usedau (Morgan 1988) |
| H-105  | Sapwuhtohr | This low islet was home to priests, and enclosed house platforms (Hambruch 1936:34-I). Pottery and the foundation of a meeting house ( <i>nahs</i> ) are reported (Morgan 1988:74).  | residential, ceremonial meeting         | tšap ū tor (Hambruch 1936)   |
| H-106  | Pwallahng  | This small islet was part of the islet communications network, with messages passed from Peikap Sapwawas (H-108) and being spread to Usen Dau (H-104) before finally reaching Pwallahng (Hadley 1981:95; Panholzer & Mauricio 2003:89, 107). There is an historic causeway that connects Pwallahng to Usen Dau (H-104) (Ayres et al. 1983:64).   | communications network                  | Pualan (Christian 1899; Bernart 1977; Morgan 1988), pūa lān (Hambruch 1936), Pwalahng (Ayres et al. 1983; Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003)  |

| Site # | Name            | Description  | Known uses                                     | Alternate name(s)   |
|--------|-----------------|--|--|---|
| H-108  | Peikap Sapwawas | This islet was the centre of communications for Nan Madol (Hadley 1981:95). Announcements would be made by people playing a triton and drum (Hadley 1981:95). The messages spread from Peikap Sapwawas out to Usen Dau (H-104) to Pwallahng (H-106) (Hadley 1981:95). The islet is also remembered as a place of worship (Hambruch 1936:34-I). It has house foundations, including one for the leader of communications, and a burial vault (Hadley 1981:95). The name Peikap Sapwawas is reported to mean “the new Pei at the high place” (Hambruch 1936:34-I). | communication network, ritual, mortuary        | péi káp tšáp ũ äš (Hambruch 1936), Peikapwsapwawas (Ayres et al. 1983), Pei Kapw Sapwawas (Ayres et al. 1983), Peikapw Sapwawas (Ayres et al. 1983; Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003), Peikapsapuas (Morgan 1988)   |
| H-109  | Narukep         | This is a small rectangular islet that comprises a continuous breakwater feature with Nahn Mwoluhsei (H-119). The islet has one stone burial vault on its east side (Hadley 1981:91).  | mortuary                                       | naru káp (Hambruch 1936), Narulap (Morgan 1988)   |
| H-110  | Pahndouwas      | This is one of two low-lying roughly rectangular islets that flank Nan Dawas (H-113). Traditions suggest that the soldiers associated with Nan Dawas slept here (Hadley 1981:91). It is reported to have five house foundations and one burial feature (Hadley 1981:91; Athens 1990:21; Seikel 2011:449).  | security, residential                          | Nan-Tauach (Christian 1899), pān tauäš (Hambruch 1936), Pan Tauas (Athens 1980b), Pahn Dawas (Hadley 1981), Pahnauwas (Ayres et al. 1983; Hanlon 1988; Morgan 1988; Athens 1990; Seikel 2011; McCoy & Athens 2012), Pahn Dauwas (Ayres et al. 1983); Pahn Douwas (Ayres 1993)   |
| H-111  | Dau             | Traditions suggest that this islet housed soldiers (Hambruch 1981:93; Athens 1980b:67). It has several house platforms, a burial as well as other features including an <i>uhmw</i> (oven) for cooking jellyfish, a <i>sakau</i> (kava) stone, a stone for sharpening axes, and a canoe dock (Hambruch 1936:35-I; Athens 1980b:70-75; Hadley 1981:95; Seikel 2011:449). A sacred eel was kept there (Athens 1980b:69; Hadley 1981:95).   | security, residential, ritual, mortuary        | Dziou (Kubary 1874), Tau (Christian 1899; Bernart 1977; Athens 1980a, 1980b), tau (Hambruch 1936),  |
| H-113  | Nan Dawas       | Nan Dawas was a mortuary compound of <i>saudeleur</i> and <i>nahnmwarki</i> , an area to worship the god Nahnisohnsapw, and an area for planning and asylum (Bernart 1977:28; Hadley 1981:93). This islet has the largest examples of <i>lolong</i> style crypts with enclosing walls. There are three main burials, a central tomb with enclosing wall, and two others built between this tomb’s enclosing wall and the islet’s massive exterior enclosing wall (Athens 1980b:18).  | mortuary, ceremonial meeting, ritual, religion | Nan Tauacz (Kubary 1874), Nan-Tauach (Christian 1899), Nan-Tauas (Christian 1899), nān tauäš (Hambruch 1936), Nantauaj (Bernart 1977), Nan Tauas (Ayres 1979; Athens 1980b), Nan Dauwas (Ayres et al. 1983), Nandauwas (Ayres et al. 1983; Athens 1983, 1984; 2007; Hanlon 1988; Morgan 1988; Bath & Athens 1990; Seikel 2011; Kolb 2012; McCoy & Athens 2012), Nan Dauas (Ayres et al. 1983; Ayres 1985), Nan Douwas (Ayres 1989; 1993; 2002; Ayres et al. 1997; Rainbird 1999, 2004; Panholzer & Mauricio 2003) |
| H-114  | Pahn Dawas      | This is a low-lying rectangular islet flanking Nan Dawas (H-113) and is mirrored in position by Pahndouwas (H-110). Traditions suggest food was prepared for Nan Madol workers here, as evidenced by <i>uhmw</i> (ovens) for jellyfish and sea anemone (Hadley 1981:89, 91; Panholzer & Mauricio 2003:84). It was also where the soldiers of Nan Dawas slept (H-113) (Hadley 1981:91). The islet has one burial (Hadley 1981:91; Seikel 2011:449, 456).  | security, mortuary, food preparation           | pān tauäš (Hambruch 1936), Pon Tauas (Athens 1980b), Pohn Dawas (Hadley 1981); Pohn Dauwas (Ayres et al. 1983); Pohndauwas (Hanlon 1988; Morgan 1988; Bath & Athens 1990; Seikel 2011), Pohn Douwas (Ayres 1993), Pohndawas (Panholzer & Mauricio 2003), Pahnauwas (McCoy & Athens 2012).   |

| Site #          | Name                    | Description   | Known uses                        | Alternate name(s)   |
|-----------------|-------------------------|---|-----------------------------------|---|
| H-115           | Kenderek                | This islet was the last stop of funeral processions, with feasting and dancing having taken place in the meeting house ( <i>nahs</i> ) (Athens 1980b:81; Hadley 1981:95). Several house platforms, canoe landings, a meeting house ( <i>nahs</i> ), and ovens ( <i>uhmw</i> ) for jellyfish are reported (Hadley 1981:95; Athens 1980b:83-88; Morgan 1988:74).  | residential, ritual               | Kontarak (Christian 1899), kōnterek (Hambruch 1936), Kontarok (Bernart 1977); Konterek (Athens 1980a, 1980b), Kohnderek (Ayres et al. 1983; Athens 1983; 1984; Hanlon 1988; Morgan 1988; Ayres 1993; Panholzer & Mauricio 2003; Rainbird 2004), Kandorok (Ayres et al. 1983; Hanlon 1988), Kantorok (Panholzer & Mauricio 2003) |
| H-116           | Pohnmweirak             | This series of breakwater walls extends from Nan Mwuluhsei (H-119) out to Peiniot A (H-117) and Peiniot B (H-118).  | breakwater                        | pōn mūirāk (Hambruch 1936), Pohnmweirok (Hanlon 1988)   |
| H-117;<br>H-118 | Peiniot A;<br>Peiniot B | Peiniot A (H-117) is a small artificial islet between the breakwater Pohnmweirak (H-116), and the natural island Peiniot B (H-118). Peiniot B was originally intended to be a linking islet for a seawall that extended to the island Temwen (Hambruch 1936:18-I). It was also intended as an islet for food preparation for the workers of Nan Madol, however this was later made closer to the site's core (Hadley 1981:89; Panholzer & Mauricio 2003:73). Hambruch (1936:18-I) reported two house mounds on Peiniot B. | food production                   | péi ni ōt (Hambruch 1936), Peinot (Hanlon 1988)   |
| H-119           | Nan Mwuluhsei           | A series of breakwater walls built from massive boulders, Nan Mwuluhsei is the only gate to Nan Madol from the open ocean (Panholzer & Mauricio 2003:54). It was used as a moorage for canoes (Bernart 1977:128). It is also said to be the entrance to a sacred mythical underwater city (Hadley 1981:89).   | breakwater, ritual, canoe mooring | Naumorlosaj (Kubary 1874), Nan-Moluchai (Christian 1899), Nan-moluch-ai (Christian 1899), nan molūšai (Hambruch 1936), Nanmolujai (Bernart 1977), Nan Molusai (Athens 1980b), Nanmwuluhsie (Ayres et al. 1983; Panholzer & Mauricio 2003); Nanmwuluhsei (Hanlon 1988; McCoy & Athens 2012), Nahn Mwuluhsei (Ayres 1993)         |
| H-120           | Lelou                   | These two breakwater walls, built from massive boulders, primarily protected the islets Rarian (H-121) and Karian (H-122).  | breakwater                        | lělóū (Hambruch 1936)   |
| H-121           | Rarian                  |   |                                   | kariān (Hambruch 1936), Darian (Ayres et al. 1983), Karian (Hanlon 1988)  |
| H-122           | Karian                  | This islet is known as the <i>lolong</i> style burial of high-ranking Nan Madol priests, as well as having a sacred <i>ketieu</i> ( <i>Ixora casei</i> ) tree that wards off ghosts (Hadley 1981:97; Panholzer & Mauricio 2003:29; Seikel 2011:449). There is a distinctive offset entry portal to the internal tombs, with a lintel supporting four courses of basalt (Athens 1980b:18; Morgan 1988:73). The islet has many <i>sakau</i> (kava) stones (Morgan 1988:73).   | mortuary, ritual                  | Kerian (Christian 1899), Karrian (Christian 1899), kariān (Hambruch 1936), Kerian (Panholzer & Mauricio 2003), Kariahn (Panholzer & Mauricio 2003), Keriahn (Panholzer & Mauricio 2003)   |
| H-123           | Lukop en Karian         | This islet has <i>lolong</i> style burials (Seikel 2011:449). For this survey, Lukop en Karian is taken to include the Hambruch (1936) numbers H-126 (Sapwutik) and H-127 (Angeir-Likiangeir).  | mortuary                          | Likop (Christian 1899), lukop kariān (Hambruch 1936), Lukapankarian (Bernart 1977), Luhkepenkarian (Ayres et al. 1983), Lukepenkarian (Hanlon 1988; Seikel 2011), Lukop Karian (Ayres 1993)   |



| Site # | Name              | Description  | Known uses       | Alternate name(s)  |
|--------|-------------------|--|------------------|--|
| H-126  | Sapwutik          | Sapwutik has one burial vault ( <i>lolong</i> ) for priests (Hambruch 1936:21-I; Hadley 1981:97). The name Sapwutik reportedly means “small place” (Morgan 1988:67).   |                  | tšap u tik (Hambruch 1936), Sapwitik (Hadley 1981; Panholzer & Mauricio 2003), Sapwuhtile (Ayres et al. 1983), Sapwuhtik (Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003; Seikel 2011)                       |
| H-127  | Angeir-Likiangeir | Angeir-Likiangeir was the burial vault ( <i>lolong</i> ) of lower ranked priests (Hambruch 1936:21-I; Hadley 1981:97). The name Angeir is reported to mean “southern wind” (Panholzer & Mauricio 2003:2).  |                  | Legineongair (Kubary 1874), āñéir (Hambruch 1936), Likiangeir (Hadley 1981), Angier (Ayres et al. 1983; Hanlon 1988; Ayres 1993; Panholzer & Mauricio 2003; Seikel 2011)   |
| H-128  | Pahn Mwasangapw   | These series of breakwater walls are laid out in a fashion that suggests Pahn Mwasangapw may have been an islet, or been intended to become an islet (Hambruch 1936:21-I). Morgan (1988:63), citing communication with Stephen Athens, reports it as a breakwater, as it has stones that are aligned presumably to let boats through, without internal fill.   | breakwater       | pan mūāš āñap (Hambruch 1936), Pahnmwasangap (Ayres et al. 1983), Pahnmwasangap (Hanlon 1988)  |
| H-129  | Lemenkau          | This islet is known for healing (Panholzer & Mauricio 2003:34). It is located near a large reef pool called Nemwenkau (The Pool of Harmful Magic) (Hadley 1981:101). The islet has three secondary wall enclosures, one of which has a residential platform, as well as a large number of sakau ( <i>kava</i> ) stones (Morgan 1988:75). This islet also has lined burial features (Hambruch 1936:21-I; Hadley 1981:101; Morgan 1988:75; Seikel 2011:449). | mortuary, ritual | Limenekau (Kubary 1874), Lemankau (Christian 1899), lēm en kau (Hambruch 1936), Lamenkau (Bernart 1977), Lemenkou (Morgan 1988; Bath & Athens 1990; McCoy & Athens 2012), Lem en Kau (Hadley 1981; Athens 1980b) |