Archaeology:
Just Add Water

volume II

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Archaeology:
Just Add Water
Underwater Research at the University of Warsaw

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Preface

Dear Colleagues,

It is our great pleasure to present to you the second volume of the U Supplement Series of the "Światowit" periodical. To a large extent it is based on the papers presented during the *3rd Warsaw Seminar on Underwater Archaeology*, which took place at the University of Warsaw on the 17th and 18th of January 2019.

An efficient and prompt process of editing we owe to the funding from the Ministry of Science and Higher Education, grant no. 959/P-DUN/2018.

Organization of the Seminar and publication of the hereby volume was possible thanks to the co-operation with the Polish Chapter of the Explorers Club, in particular its President, Professor Mariusz Ziółkowski, and the Vice-President, Marcin Jamkowski, to whom we are deeply grateful.

We would also like to acknowledge and appreciate the support of the University of Warsaw, namely the Vice-Rector Ph.D. habil. Maciej Duszczyk, the Dean of the Faculty of History, Ph.D. habil. Małgorzata Karpińska, Professor UW, as well as the Director's Board of the Institute of Archaeology: Ph.D. habil. Krzysztof Jakubiak, Ph.D. Michał Starski, and Ph.D. Marta Żuchowska.

The special thank you we traditionally owe to the Diving Museum by the Warsaw Diving Club, especially the Museum's Curator, Karina Kowalska, and the Club's President, D.Sc. Grzegorz Kowalski, who have been supporting our activities for many years, and constantly guide and help us in numerous enterprises.

We would like to extend our gratitude to all the Authors and Reviewers, who have been extremely diligent and punctual to keep up with our strict deadlines.

During the editing of the volume we have received invaluable consultations in the matter of ancient languages by Tomasz Płóciennik and Ph.D. Joanna Wegner, who we would also like to thank with all our hearts. The post-editing process was successful due to the the kind assistance of Ph.D. Rafał Dmowski, who we owe enormous gratitude.

The whole book was once again skilfully supervised and managed by the one and only irreplaceable Ph.D. habil. Bartosz Kontny, Professor UW. Him we would like to thank for all the advice and help with difficult choices, as well as the dedication to the organizational matters, even though the really tight schedule.

Last but not least, we would like to thank all the Readers who have reached for the hereby volume. We sincerely hope you will enjoy the outcome of our efforts and wish you pleasant reading!

Aleksandra Chołuj

Małgorzata Mileszczyk

Magdalena Nowakowska

3rd Warsaw Seminar on Underwater Archaeology

3rd Warsaw Seminar on Underwater Archaeology held on 17th-18th of January 2019
at the University of Warsaw
(photos by: M. Sugalska)

Foreword

The volume, which we hereby present to our esteemed Readers, is the vivid proof that underwater archaeology at the University of Warsaw is doing more than well. It is the second publication in the ***"Światowit" Supplement Series U: Underwater Archaeology***, issued for now (and we hope this pace will be sustained!) with a frequency of a periodical. Within the book one might find i.a. the texts being an outcome of the international ***3rd Warsaw Seminar on Underwater Archaeology***, organized in the Institute of Archaeology, University of Warsaw. The Readers will discover here the articles presenting broad chronological and geographical range of issues: from the Prehistory until the Second World War, from Guatemala and Peru to Poland and Slovakia. We are trying to reflect this diversified character also by the choice of photographs on the cover.

The leitmotif of all this vast range of archaeological issues is **water**: realm bearing a magnificent symbolic character. Changing its colour (even during the day – from the blackness, through greyness, then blue, until the bloody-red at the sunset, turning again into black) and visibility, it has manifested also other features, which can be contemplated as signs of its animation, such as movement: horizontal (currents, waves, tides) and vertical (fluctuations of the surface). It was also the source of life quite literally, providing food and dihydrogen monoxide, essential for living.

Along with its whole mystery and dangerousness, water may also serve as a refuge (lake settlements from the early Iron Age) and a trade route, at the end of which there is a (hopefully) safe harbour. That is how underwater archaeology marches onto the land... Although, it is neither place nor time for the deliberation about the definitions of archaeology related to water environment; the discussion in this matter has lasted for many years, abound in more and more new terminological propositions, still being far from any resolutions. Whichever position we assume in the aforementioned debate, it is impossible not to notice that the symbolism, the rituals, and everyday casual activities essential for life and connected with water pass through each other, which is well-exemplified by the hereby volume. Objects lost during transportation and other kinds of exploitation of water basins, items put in the water as a matter of rituals, military aspects connected with watery environment, lake settlements, harbours, and trade – all of that and even more you can discover in *Just Add Water 2*. To all the Readers, who are going to immerse themselves into this topic, I wish a pleasant intellectual adventure and... good dives!

Bartosz Kontny

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Petén Itzá Project – Results of the Underwater Reconnaissance in Lake Petén Itzá (Northern Guatemala)

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Abstract:

In 2018 in Lake Petén Itzá (Petén Department, northern Guatemala) underwater archaeological survey has been conducted by the Polish–Guatemalan group of archaeologists. During the first season underwater reconnaissance has been performed in seven zones of the southern part of the lake. The main surveyed areas were the surroundings of the islands: Flores, Santa Bárbara, El Hospital, two smaller nameless ones (currently submerged due to the increase of the water level), as well as some part of the coastal area of the Tayasal Peninsula (north of Flores). The main objective of the first phase of the project was to locate the traces of the ritual activities of the Maya peoples inhabiting the neighbourhood of the lake as well as capturing the evidence of the final naval battle between the Itza Maya and Spanish conquistadors which took place in 1697. The aim of the article is to present the results of the reconnaissance as well as hypotheses and preliminary interpretations of the discoveries based on the data acquired during the field research.

Keywords*:*

Lake Petén Itzá, *Nojpeten*, Guatemala, the Maya, the Itza, conquest, naval battle, ritual activity

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Introduction

Lake Petén Itzá, one of the largest in Guatemala, is a reservoir located in the central part of the Petén Department (northern part of the country), in the middle of the chain of lakes extending from west to east (**Fig. 1**). It is located in between the communities of San Andrés, San José, San Benito, and Flores at the level of 110 m a.s.l. Its surface covers ca. 99 km^2 and the depth in the northern, deeper basin is close to 160 m.

In the southern part of the lake there is an island, which inhabitants have played an important role in the history of the Maya. The settlement located there used to be called *Nojpeten* (in the Itza Maya language: 'the large island', sometimes called also *Taj Itza* – 'at [the place of] the Itza'], today being known as Flores (current capital of the Petén Department); before the Spanish conquest it was a capital of the powerful group of the Itza Maya. As it is assessed on the basis of some similarities both in the archaeological and linguistic data, in the mid-fifteenth century, as a result of the migrations, they arrived to Petén from the Yucatán Peninsula (present-day Mexico). The Itza Maya have established a very powerful state, which capital was resisting the Spanish conquistadors for 172 years – starting from the arrival of Hernán Cortés in 1525 until the end of the 17th century. *Nojpeten* was not captured until the 13th of March 1697; its demise was a result of the bloody attack led by the governor of Yucatán, Martín de Urzúa y Arizmendi (Jones 1998: 295).

History of the Itza in Petén

According to Grant D. Jones (1998: XIX), after leaving the Yucatec *Mayapan* (present-day Mayapán in Yucatán Department, Mexico) in the 15th century certain elite families (some of which have belonged do the *Mayapan* elites deriving from *Chichen Itza* [present-day Chichen Itza in Yucatán State, Mexico]) have migrated to the surroundings of Lake Petén Itzá. Even though no chronicle includes precise information about the place of origin of the Itza, as it was already mentioned, some archaeological and linguistic features might indicate that they have emerged exactly from the aforementioned areas. After arriving to the new terrains the Itza Maya occupied, among others, the island called by them *Nojpeten* (present-day Flores). In its central part they have built temples and palaces, which were the middle point of the large settlement having been surrounded by ca. 200 houses located at the peripheries (Jones 1998: 71–72). They have established their capital here, which in now famous in history as the last independent 'bastion of the Maya'.

Along with the Spanish conquest of the so-called New World the European invaders have started to systemically occur in the area of the lake. The beginning of the contacts of these two cultural units can be dated for 1525, when into the area of the lake basin the first of the Spanish leaders arrived: Hernán Cortés himself (Jones 1998: 5). The aim of the invaders was obvious: to conquer the Itza state, which was necessary to realize the pursuit to colonize the whole continent. In purpose of achieving their objectives the Spaniards have used various ways. According to Means (1917: 83) their activities can be divided into three main chapters: (1) the research phase, followed by (2) forcing on the indigenous peoples the Christian faith and, in the end, (3) stage of trade and military contacts.

From the aforementioned moment of the Cortés's arrival the visits of the Spanish leaders and missionaries have started to become the constant element in the region. The Itzas have demonstrated their approach towards the invaders stating their intentions quite clearly. A perfect example can be the story of the monks, Bartolomé de Fuensalida and Juan de Orbita, who have been chased by the Maya from their territories more than once. When in 1618 the Franciscans destroyed the figure of the stone horse, presumably connected with the story of Cortés's arrival (*vide*: Jones 1998: 36 –37, 44, 437 [fn. 29]), having a symbolic meaning for the Itzas, they have been banished for the second time. This event has definitely discouraged them to the continuation of their mission on this area (*Historia de Yucatán*, after 1971 [ed. F. Anders]: 212–238, based on an original copy of Fuensalida's account, now lost[1]). Although it is also worth mentioning, that much more tragic in the results demonstrations of the Itza opposing the Christianization processes had happened as well. The history of another Franciscan, Diego de Delgado, can be mentioned here. He has arrived to the Itza accompanied by 12 soldiers originating from Tipuj (Belize) and has been sacrificed at one of the western shores of the lake (*Documentos respectivos al servicio...*, after: Scholes and Adams 1936/1937: 160–173), which was not the only case like that. The similar effect had a visit of the missionaries, Cristobal de Prada and Jacinto de Vargas, whose aim was as well the Christianization of the inhabitants of the island. This has ended not only with the fiasco, but also death of the few Spaniards by the hands of the Itza (*Historia de la provincia...*, after 1973 [ed. F. Gall]: 422). The Maya have tried stopping the colonization plans

[1] Jones (1998: 439, fn. 53) informs on the margin of his work that a *"recently published manuscript presents a rather different account of both the 1618 and 1619 missions of Fuensalida and Orbita, also said to be based on Fuensalida's original account (San Buenaventura, 1994, pp. 107–133). The authenticity of the manuscript is highly suspect, and I have declined to rely on any part of it as a source of information".* The more thorough research into the original written sources is supposed to be one of the main objectives of further studies of the *Petén Itzá Project*; the information presented in the hereby article bases on the published volumes.

not only with the activities limiting the Christianization process. In the 1692 the Itza have also thwarted the plans of the governor of Yucatán, Martín de Ursúa y Arizmendi, who wanted to build a road joining the provinces, which was supposed to ensure the simplification of the conquest (Jones 1998: 111–112). The examples of the resistance to the Spanish invaders by the Itza have been quite numerous, as in result the attempts of capturing their state have lasted for about 172 years. The one, who has managed to do that, was the aforementioned Martín de Ursúa y Arizmendi; at the 13th of March 1697 he led the attack on *Nojpeten* from the galiot (built for that purpose in the camp at *Nixtun–Ch'ich'*), murdering incredible number of the Maya defenders. As the fight between the Itza and the soldiers with firearms, thrown weapons, and blades was very unequal, the Spaniards have captured the city the same day. Next, on the 14th of March, Martín de Ursúa y Arizmendi officially seized the island giving it a new name: *Nuestra Señora de los Remedios y San Pablo del Itzá* (Sharer and Traxler 2006: 757–779; Jones 1998: 304).

History of Research

The region inhabited once by the Itza Maya is an area of the large archaeological potential. Over the years a lot of projects have been conducted here, although most of them on the land. As an example might serve the *Tayasal* site, located on the peninsula north of *Nojpeten*. In the years 2009 to 2012 the archaeological research led by Timothy W. Pugh (*Proyecto Arqueológico Tayasal*) has been conducted there. The research has touched nearly every sphere of life of the inhabitants of the centre. In the reports one might learn a lot of information referring e.g. to the social relations, architecture, pottery, development of astronomy, as well as the ceremonial sphere, all of which have changed their character along with the influx of the Spanish colonizers (Pugh 2011).

Proyecto Arqueológico Tayasal is only one of a few projects having realized the thorough research in the region. Unfortunately, most of them did not employ the methods of underwater archaeology, which seems quite relevant in case of the studies of the region so strongly connected with the lake. Although, over the years some reconnaissance has been conducted in the lake as well; it has never lasted longer than one season. As an example may serve the penetration of some areas of the lake conducted in 1959 by the group of six scuba divers and amateur archaeologists. They have reported that at the bottom of the Petén Itzá some ceramic artefacts are present (among others they have recovered a unique whistle with the anthropomorphic depiction, originating from the Terminal Classic period [Mata 2002: 596]).

Those discoveries have caused quite an interest in the world of science and culture. Due to that in 1967 the French minister of culture, André Malraux, sent to Guatemala underwater expedition, in the aim of further recognition of bottom of Petén Itzá. Yet again the artefacts have been discovered, which are currently in the Institute of Anthropology and History in Guatemala[2] (Mata and Medrano 2011: 26).

Another opening on the topic of Lake Petén Itzá research occurred in 1992; this time the project has been conducted by the American archaeologist, Richard Hansen. Its objectives included the recognition of the bathymetry and stratigraphy of the lake. Specialist equipment has been used for that, for example sonar, the echo-sounder as well as devices for sediment studies (Mata 2002: 596–597). Apart from the analyses performed on the basis of the samples and measurements, the archaeologists have discovered 39 artefacts. Those were e.g. the ceramic items from the pre-Hispanic period as well as the residues of the stone buildings located north and north-east from Flores Island. Their analysis has suggested that before the ages the level of the lake was much lower (Mata 2002: 598; on the fluctuation of the water level *cf.* e.g. Pérez *et al.* 2010), which leads to conclusions that under the sediment there can be many more artefacts.

Recently also the participants of the land project *Itza Archaeology* have done a few dives in the area of Nixtun–Ch'ich' settlement, at the western part of the southern lake basin. The researchers have captured some traces, probably the residues of the harbour, which have to be verified during further research (*Itza Archaeology Goes Underwater* 2015[?]).

Petén Itzá Project – Research Objectives

Petén Itzá Project (hereinafter: PIP), which was launched in 2018, is a Polish–Guatemalan archaeological underwater enterprise. The main objective of the researchers is to acquire information in reference to everyday life and ritual activities of the Maya inhabiting the region of Lake Petén Itzá, as well as acquiring data concerning the final Maya–Spanish battle, which took place at the lake in 1697.

It is worth underlining that the team is focused on collecting information about the inhabitants of the region not only in the social and ideological aspect but also the economical

[2] Spanish: *Instituto de Antropología e Historia* (IDAEH).

and political one. The cooperative aims at acquiring data allowing further studies of both the inside and outside relations of the researched societies (both at the interstate and interregional level).

The interesting effect of the pottery analysis of the artefacts acquired from the lakebed might be also some new information about the chronological sequence concerning the settlement of the island itself, which is quite scarce up till now, because of the continuity of the settlement until present.

Activities of the researchers, apart from the fieldwork itself, are also aimed at engaging local community and authorities into the tasks concerning the protection of the cultural heritage, also the submerged kind.

First Research Season

In 2018 the first of the PIP's archaeological underwater survey has been conducted in seven areas of the southern part of Lake Petén Itzá (**Fig. 2**). Its purpose was first of all the recognition of the area and location of the sites where the traces of the warfare and ritual activities of the Maya are present. On its basis the spots have been chosen where the more comprehensive fieldwork can be planned for further seasons.

Area I – Flores Island

The area includes the zone around Flores Island (**Fig. 2**). The stone coating of the slope, present at the shore of the island, after ca. 10 m changes into solid sediment covering much flatter lakebed, with smaller stones and sand. Majority of artefacts have been located on top of that, although some of them were nearly wholly covered by the sediments. In case of those one might presume the objects being in fact the *in situ* sacrificial deposits. They have all been located in the same zone, north of Flores Island.

It seems that the information preliminarily confirms a very probable hypothesis stated by Stephan F. de Borhegyi (1963: 24), that this zone most probably has served the inhabitants of the island (presumably also the whole region) for the ritual activities. This presumption might be proved by the discoveries from the first research season: the aforementioned two deposits, which probably have been discovered *in situ*. One of them consists of three bowls, one inside another (**Fig. 3**). Inside the top vessel many fragments of the burnt wood, animal bones, and obsidian have been discovered. The bowls have been located on two larger flat vessels with three feet, on which the ca. twenty-centimetres-long obsidian blade has been

deposited. Tools of this type are very often discovered in the ritual context and they are connected with the sacrifice offered to the deities. The vessels constructing this deposit have been dated to the Late Classic period (600–800 A.D.).

In the close proximity of the deposit, in the same zone of the lake, another object probably *in situ* has been located: quite rarely discovered vessel from the Proto-Classic period, 150 B.C.–250 A.D. (**Fig. 4**). This example is also connected with the ceremonial character due to the known analogical vessels with three or four feet from different periods discovered on sites in the ritual context (Źrałka *et al.* 2012: 4–6, fig. 5; Chase and Chase 2018: 6, fig. 2a). Its presence in this zone of the lake allows inferring that at least since that moment in history the area has been a place of some kind of cult.

In the same research zone, a little further north from the earlier mentioned discoveries, another artefact has been located which might confirm the hypothesis about the ceremonial character of the place (even though it has not been discovered *in situ*). It was a ceramic fragment of the incense burner with the anthropomorphic depiction (**Fig. 5**). Incense burners have been vessels used for burning the natural scented resin, copal, and rubber, although they were also used for burning other organic materials, such as maize and blood (Rice 1999: 25–28). During some ceremonies, such as termination rituals (which aim was a definite end of the connection of some architectural structure with a particular deity) such vessels were intentionally broken. Very often such fragments might be observed in the proximity of the Maya temples (Ferree 1972: 13–15). It cannot be excluded that the anthropomorphic fragment discovered in Péten Itzá might be an example of the aforementioned ritual practice and that is why another pieces of the vessel could not be found around the 'face'.

Chronology of the pottery discovered up till now indicates that the considered area located north of Flores Island might have been a place of cult at least from the Proto-Classic period, so it can be connect to the chronologically older settlement located in here before the arrival of the Itza Maya.

The area of Flores Island has provided not only the artefact collection with a huge probability proving the water-connected rituals of the inhabitants of the island but also about the warfare activities. Close to the western shore of the island a stone object has been located, which form indicates that it was probably a head of mace (**Fig. 6**). Majority of the sources indicate that the final battle between the inhabitants of *Nojpeten* and Spaniards have taken place west of the island (*Ursua to Real Acuerdo*, after: Jones 1998: 297, 492 [fn. 8]). It seems

that the information provided by the Spanish accounts most probably has been confirmed by the archaeological sources.

Area II – Presumed Battleground

This zone includes the area expanding west from Flores Island (**Fig. 2**). According to the sources (*Ursúa to Real Acuerdo*, after: Jones 1998: 297) was the area of the battle between the defenders of *Nojpeten* and the Spaniards. Due to the fact, that the lakebed in between Flores and Santa Bárbara is covered with a thick layer of sediments, no artefacts have been recovered there in spite of attempts. Nevertheless, the aforementioned probable head of mace from the surroundings of the western shore of the Flores might be the proof that the battlefield is in fact the area further west, and that it might be covered with the artefacts of the military character.

Area III – Tayasal Peninsula

Activities of the project have been conducted also in the area along the Tayasal Peninsula, north of Flores (**Fig. 2**). Unfortunately, as in case of the previously mentioned zone, a very thick layer of silt made it impossible to collect any substantial artefacts (apart from the few pottery shards) during the non-invasive reconnaissance.

Area IV – Santa Bárbara Island

The next research area was the surroundings of Santa Bárbara Island, located west from Flores (**Fig. 2**). North of the islet, very close to its shore, the sandy lakebed is covered with stones of various dimensions and large tree trunks, further north turning into a thick layer of silt. At the south-eastern part the steep, stony slope ends in vast silt sediments, very often whitish in colour. Some pottery has been located in the surroundings of the island; one should distinguish quite characteristic pieces recovered so far only in the area of Santa Bárbara: vessels covered (or produced) with white clay (**Fig. 7**). It is quite possible that they might be the proof of the existence of the independent pottery workshop located on the island, but this hypothesis it is to be investigated, as the different colour of the pottery surface can also be the result of the water and sediment erosion.

Areas V and VI: Submerged Islands no. 1 and 2

These two separate operations have covered the area of the submerged islands located east (no. 1) and north-west (no. 2) from Flores (**Fig. 2**). Currently no part of dry land protrudes above the surface of the water. In the area of island no. 1 the stone covered lakebed

was reported, as well as the thick layer of silt disabling the work; in case of island no. 2 the large stone slope is present. Second islet is a place of a significant archaeological potential, due to the significant amount of pottery present at the lakebed, which may be the clue for more artefacts under the sediments.

Area VII – Hospital Island

This zone covers the area around Hospital Island, which is located north-east from Flores (**Fig. 2**). On the stone and sludgy lakebed plenty of artefacts are located, dated from the Late Classic period, through the colonial times (1700–1821) until the modern epoch (1821–1950), when the hospital was located there (some of the collected artefacts are connected with its activity, e.g. glass ones, containers of medicines and other specimens, and maybe also few metal objects). They unique artefact from this area is undoubtedly a large ceramic vessel in quite unique form, on the surface of which an engraved ornament is visible (**Fig. 8**). The shapes of some decorations allow reflecting that it might have been the unsuccessful attempt of the glyphic writing, although at this phase of research it is not more than a bold hypothesis. In the close proximity of the vessel a large shell of the *Turbinella Angulata* type has been located, characteristic for the waters of the Caribbean Sea (Bandel 2003: 88; **Fig. 9**); its presence might indicate the contacts of the local inhabitants with the occupants of the Caribbean coast. Such a shell might have been used as a musical instrument (Moholy-Nagy and Ladd 1992: fig. 5.35) or has been the object of a large social significance, as in the Maya world it was connected with the elites (*Relación de las cosas de Yucatán...* after 1986: 39; Schele and Miller 1992: 66–71). It might also have been a symbolic item, as the shell in the Maya culture was closely connected with the birth (Thompson 1950: 133), as well as with sacrifices, warfare (Schele y Miller 1992: 215), underworld, and death (Thompson 1950*:* 49, 173, 278).

Synthesis and Conclusions

Lake Petén Itzá, or at least its preliminary surveyed southern part, is undoubtedly of a large archaeological potential. After the first research season of the project its participants have without a doubt observed some regularities and tendencies which will be verified during further research seasons.

First of all it has to be underlined that the research in 2018 season had a character of the reconnaissance aimed at recognizing the basin. It will result in efficient choice of the research methods as well as sites to perform more thorough excavations in the further planned seasons.

Even though it was only the reconnaissance, over 800 artefacts have been collected from the lakebed, the significant majority of which are the ceramic ones (**Fig. 10**). Only few objects were confirmed to be discovered in the place where they had been originally deposited. It has to be taken under consideration that over the centuries the water currents have been acting on the object located at the bottom, to some degree changing their location and position. Therefore, significant majority of the acquired artefacts was deprived of the context by natural means.

Majority of the collected material originates from the surroundings of Flores and Hospital Islands, specifically: the zone located between Flores and San Miguel (Tayasal Peninsula); the largest number of artefacts has been located north of Flores.

Thanks to establishing the chronology of the ceramic material one might observe how the human activity in the particular periods of time looked like. It has to be taken under consideration that the data has been acquired during the underwater survey research, not actual excavations, which (in the future) might indicate the wider context of the findings.

On the basis of the collection of vessels and the primarily established chronology of the 'sites' one might assess that the pottery from the Proto-Classic until the Late Classic period is mostly ceremonial and tableware; artefacts originating from the periods from the Terminal Classic (800–950 A.D.) until the Post-Classic (1000–1697) are the of the so-called applied character (they served first of all to prepare and store food and are the most numerous group of in the assemblage). The Colonial pottery consists mostly of jugs of the medium size.

Apart from pottery artefacts the metal, stone, shell, and glass ones have been located, although they establish a much smaller percentage of the objects.

Both the number and the type of artefacts might indicate the character of some parts of the lake. After the preliminary reconnaissance it seems very probable that the area connected with some kind of ritual activity has been located, as well as the probable battleground has been somehow captured with the discovery of the stone mace, where the activities during the final clash between the Maya and Spaniards might have happened.

It is also worth mentioning, that on the basis of research it has been established that the inhabitants of the region very probably have maintained some trade contacts with other societies, which were living in the area of the Caribbean Sea. The example of the artefact confirming this hypothesis is a shell of *Turbinella Angulata* of a Caribbean provenance.

During the first research season the attention has also been paid to other areas of the lake as well as the water reservoirs in its surroundings, to acquire information about the potential spots for further research. If the future allows using the professional research equipment, the verification of the hypotheses stated above will be possible, as will be acquiring new information about the settlement and activities of the Maya in this particular region.

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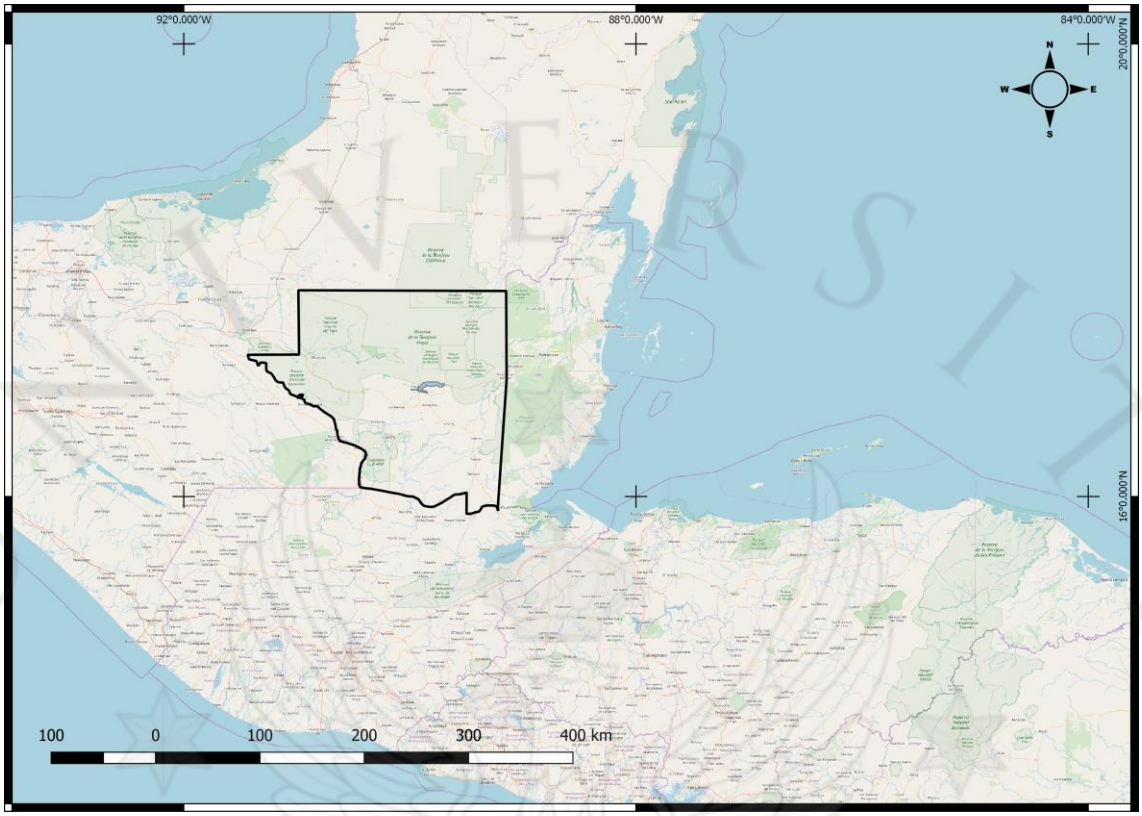

Fig. 1 – Map of the Petén Department with the location of Lake Petén Itzá (elaborated by: M. Popek)

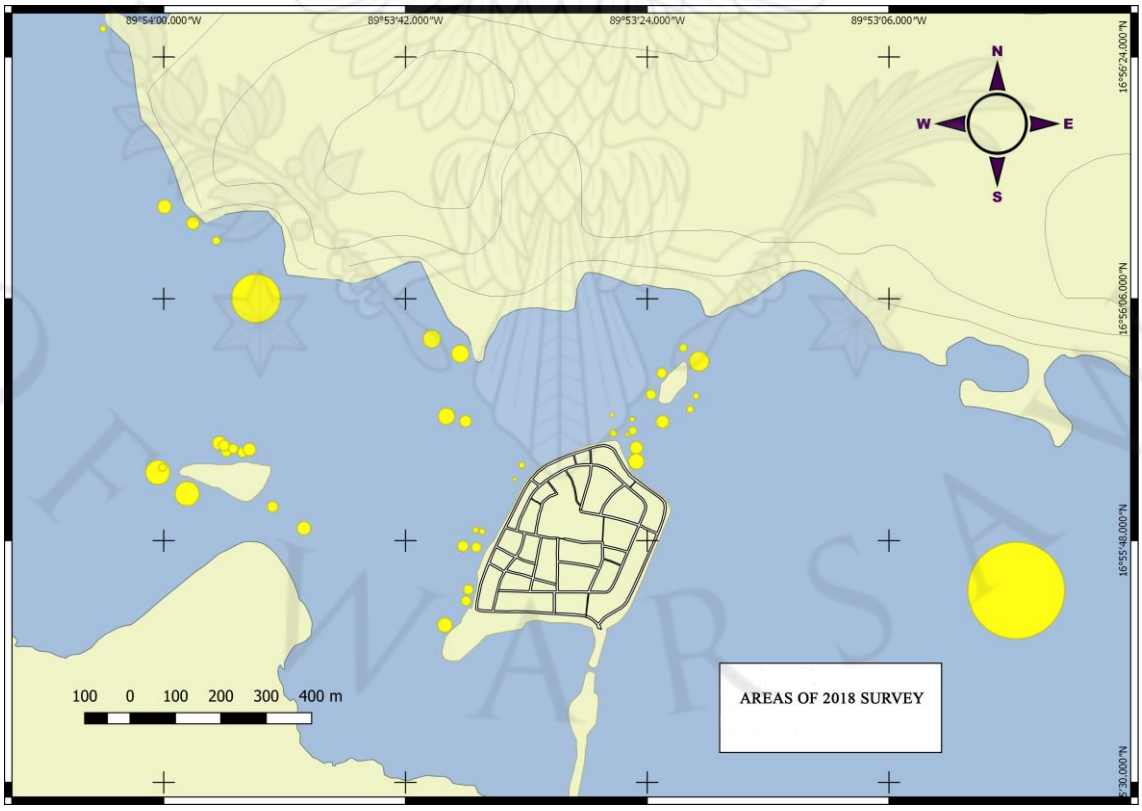

Fig. 2 – Map of the particular research areas (elaborated by: *Petén Itzá Project*)

Fig. 3 – Ritual deposit (photo by: *Petén Itzá Project*)

Fig. 4 – Ceramic vessel of a ritual character (photo by: *Petén Itzá Project*)

Fig. 5 – Fragment of an incense burner with the anthropomorphic figure (photo by: *Petén Itzá Project*)

Fig. 6 – Probable stone mace head (photo by: *Petén Itzá Project*)

Fig. 7 – Vessel covered with white clay (photo by: *Petén Itzá Project*)

Fig. 8 – Vessel with the engraved ornament (photo by: *Petén Itzá Project*)

Fig. 9 – Shell of the Caribbean provenance (photo by: *Petén Itzá Project*)

No.	AREA	RIMS	BOTTOMS	BODIES	HANDLES	FEET	TOTAL
I	Flores Island	83	52	379	9	31	554
III	Tayasal Peninsula	6	2	15	0	0	23
IV	Santa Bárbara Island	36	8	63	1	0	108
V	Submerged Island 1	0	1	0	0	0	1
VI	Submerged Island 2	6	0	4	1	0	11
VII	Hospital Island	35	5	47	4	7	98
TOTAL		166	68	508	15	38	795

Fig. 10 – Number of ceramic artefacts in the particular research areas (elaborated by: *Petén Itzá Project*)

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