

## Underwater Cultural Heritage Conservation and the Convention Practice in China

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### Abstract

*China has large number and various types of underwater cultural heritage resources, which altogether forms an essential part of China's cultural heritage. In order to manage such valuable cultural resources, the nation has been playing the most important, leading role and this state-led working mode is enabled through supports from all aspects: organizational, legal, financial and institutional. Starting from 1970s, underwater archaeology went from foreshore to coastal waters then to high seas. Currently, more than a hundred wreck sites have also been located in Chinese waters. Several submerged ancient town remains and burial sites were also discovered. UCH conservation is entering into a spanking new stage of expanding and transformation. Through years of learning, comparison and practical experiences, one has to admit that China has done quite a good job in preserving its underwater cultural heritage resources. However, problems also exist. By now, China's policy towards UCH conservation is "centered on coastal areas, underline inshore waters, begin surveys in internal waters and get ready for high seas. China sincerely hopes to facilitate more international cooperative projects, and actively take part in the global UCH conservation campaign.*

**Keywords:** UCH, Underwater Cultural Heirtage, UCH in China, Convention Practice, Nanhai I, Nan'ao I, Underwater Archaeology, White Crane Underwater Museum

### Introduction

As we all know, China is famous for her long and brilliant culture. Possesses over 18000 kilometers' coastline, nearly 300 square kilometers' coastal areas and territorial sea and more than 30 square kilometers' inland waters, China is a nation with great sea power. Its long navigation history and developed water transportation and trade system, as well as the world famous Grand Canal and Maritime Silk Road, made China a country of abundant underwater cultural heritage. At the present day, we are gradually developing a proper way of UCH protection in China.

### Current situation of UCH Conservation in China

In China, conservation and management of UCH is led by the central government, with

support from authorities of all levels. Cross-sector cooperation is also pervasive in this process. However, the real business started rather late, in March 1987, state administration of cultural heritage directed the establishment of the underwater archaeology team, with support from various relevant governmental department and organizations. Later in November, a research department on underwater archaeology was formed within the National History Museum of China (Wu, 2007). The country's underwater archaeology began from that moment.



*Fig. 1 Recent Underwater Archaeological exploration organized by the Center. (National Center of Underwater Cultural Heritage)*

At the same time, relevant laws and regulations provided all actions a solid legal basis. In 1989, following the “Law of the Peoples Republic of China on Protection of Cultural Relics”<sup>1</sup>, the state council enacted the “Regulation of the Peoples Republic of China on Conservation and Management of Underwater Cultural Relics”<sup>2</sup>, which has been the foundation

of all UCH conservation works in China for more than 20 years. As the situations are becoming different day by day, relevant authorities are working actively for an updated version of the regulation. All this time, the government has obtained great results in fighting criminals since a range of activities fighting against looting and vandalism according to the regulation has been proved effective. In today's China, the State Administration of Cultural heritage<sup>3</sup> (SACH) is the leader of UCH conservation team, while the National Center of Underwater Cultural Heritage (Fig. 1), directly under SACH's leadership, is the only national and newly established research organization specially focusing on underwater archeology and UCH conservation. The National Conservation Center for Underwater Cultural Heritage was established in 2009 (National Center of UCH of China , 2013), consisting of the Administration Office (Secretary Office), Technique & Equipment Department, Institute of Underwater

Archaeology, Underwater Cultural Relics Protection and Conservation Department, branch organizations are also under construction in Ningbo, Qingdao, Wuhan and Fujian. The Center nicely played its function, actively developed UCH conservation, research and excavation projects, and got fully confirmations from SACH, and local governments and institutes. It marked that UCH has got a new position as the important content of the national cultural heritage and museum undertakings, and a new chance of focused promotion and rapid development. Generally, the Center is responsible for the works below:

- Undertakes daily communication and coordination among ministries for national UCH conservation issues;
- Organizes, coordinates and implements national UCH surveys, excavations, conservation, preservation, scientific research and trainings;
- Draws up national UCH conservation plans, undertakes researches on related legislation, protocols standards;
- Undertakes the management, research and development of UCH conservation technical equipment;
- Carries on the management of the Nanhai UCH base and Xisha Archaeological Workstation, and provides guidance on professional works of local UCH offices;
- Facilitates and enables public outreach, international exchange and cooperation of UCH conservation;
- Carries on other tasks assigned by SACH.

Other than the Center, a national level organization, most coastal provinces have established their own institutions and organizations working for underwater archeology and UCH conservation, like the well-known Guangdong Maritime Silk Road Museum<sup>4</sup> and the Quanzhou Maritime Museum in Fujian Province<sup>5</sup>. As components of the UCH protection army in China, all these organizations and institutions greatly improved our professional abilities and standards.

The government also paid great attention to professional training. SACH has held 5 professional underwater archeological training courses successively before 2009. And in more recent time, in order to satisfy this expanding field, the Center has helped SACH with one underwater archeology training courses and two relic preservation

training course (Fig. 2). As a result, there are now over 100 underwater archeology professionals and over 40 restoration/preservation professionals. They work in different coastal cities, but can be gathered together when needed, which buys insurance for the overall UCH conservation work.

Financially, the state government has always been very generous in funding works related to conservation and management of UCH. Local government also often paid big money since they consider successful conservation and management of native cultural heritage underwater is in a way an effective method to uncover local history, enhance



*Fig. 2 First Underwater Archaeological Training Programme. (National Center of Underwater Cultural Heritage)*

local identity and pass on significant cultural remains to future generations. And a fund guarantee mechanism where the central government dominants and local government facilitates has been well established. Aiming at bring UCH business forward; China funded its very first underwater archaeology work ship in 2011. The SACH and the Center organized and coordinated the design and the construction of the ship. This ship, with a displacement of 930 tons and designed draft of 2.7 meters, is going to have its maiden trip in April 2014 (Fig. 3). Development of such a wide range field needs insight on international trend, which, China has always been paying attention to. For 20 years, China has been actively working with countries like Korea, Japan, Italy, France and Indonesia and so on. During the process of international cooperation, our research ability has been greatly improved and professional team strengthened. Experts from abroad were often invited for talks, conferences and projects.

### **UCH Conservation in China: The Convention Spirit Practitioner**

The UNESCO Convention on the Protection of Underwater Cultural Heritage, published on 2 Nov, 2001, provided worldwide UCH conservation a scientific and formal reference,

and oriented its development towards international cooperation. The convention is also significant in terms of its philosophy: emphasizes the transformation of underwater archaeology into underwater cultural heritage; draws attention to public education; underlines the importance of in-situ conservation and minimal intervention as well as pays respects to human remains. Although currently not being a contracting party of the convention, China, nevertheless, has already taken part in conserving underwater cultural heritage. With quite a few major UCH projects undertaking, this country is a true practitioner of the convention as it will be outlined in the following section.

### **In-situ Practice in China: The White Crane Underwater Museum<sup>6</sup>**

An outstanding example of in-situ UCH conservation is the construction of the White Crane Underwater Museum in Chong Qing (Fig. 4). This museum is by far the only museum built *in-situ* built on a submerged site. Visitors can get 40 m underwater through a corridor. Neither the site nor its surrounding environment had been greatly changed, and this practice was widely recognized. The Ridge of White Crane (Baiheliang), a naturally formed sandstone bridge, locates in Yangzi River and can only be seen in winter. It shows us 72 years of water level from 763 AD over 1200 years from now. In order to keep the site original and integrated, we successfully made the museum despite of the difficulties (Gao, 2012).

### **Practice on Increasing Public Awareness.**

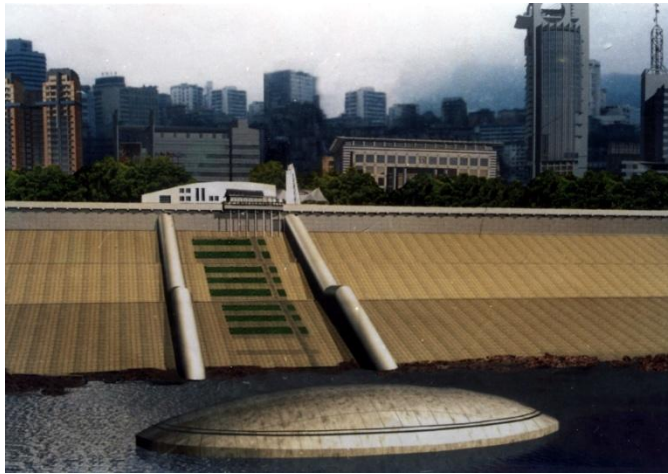
Following the convention's notion of increasing public awareness, Chinese put lots of efforts in presentation and interpretation of UCH through effective management approaches. The convention requires UCH to be made accessible for the public,



*Fig. 3 Underwater Archaeology Workshop.  
(National Center of Underwater Cultural  
Heritage)*



especially for school education, and that is exactly what they did for the late Song dynasty wreck South China Sea I. The Maritime Silk Road Museum<sup>7</sup> of Guangdong is a museum themed on this wreck and associated remains, since its opening in 2009; it has welcomed over a million visitors of different types, making it a definite landmark of the community.



*Fig. 4 The White Crane Underwater Museum.  
(National Center of Underwater Cultural Heritage)*

### **Authorized Salvage Excavation: Salvage as a Whole and In-situ Excavation**

Although the Convention believes in-situ conservation is the first option, but first choice does not necessarily to be the priority. If the reason is sufficient and urgent, partially or fully excavation becomes a priority ahead of in-situ conservation. Because of illegal smuggling and destruction associated with these illegal practices, we

conducted the scientific excavation by the authorization of the government, and creatively began the method of “salvage as a whole and exhibit and excavate in-doors” of large shipwrecks. “Nanhai I” was found in 1989 during the China-Japan cooperated investigation of shipwrecks in South China Sea (Fig. 5). It is one of the few Song dynasty ship found well preserved, thus with significant historical value. However, because it was located in the open sea, and it was difficult to monitor, it had been looted and partially destroyed over the years. The successfully salvage of “Nanhai I” as a whole was a good attempt of the comprehensive implementation of underwater archaeology, relic conservation and maritime engineering. It is a strong evidence of the multi-fields, multi-departments UCH cooperation in China, as well as the best interpretation and scientific development of authority and integrity (Wei, 2008).

“Nan’ao I” was located in “Nan’ao” waters of Guangdong, miles from the seashore (Fig. 6). Since it had been looted and destroyed for many times in the past, we decided to do the excavation. The project started in Sep. of 2009, though excavations happen in

2010/2011 and 2012. More than 30 underwater archaeologists and over 10 specialized conservators cooperated to finish the work, 3 professionals from Korea were also invited. The team had mastered the distribution of the shipwreck and the structure, the shipwreck heads north, leans east, 2485 cm in length, widest section was 750 cm, 25 boards. Cargos involve pottery and ceramic, metallic and organic relics. The basic structure is complete, 26 thousands artifacts were lifted, sampled big amount of different soils, remains of animals and plants, metal goods, and etc., did the comprehensive research of scientific archaeology, animal archaeology and plant archaeology. The maritime geological environment was mastered though sonar scans. The team established an iron conservation frame after the excavation was over in 2012, to conserve the main body of the site in-situ (Chen, 2012).

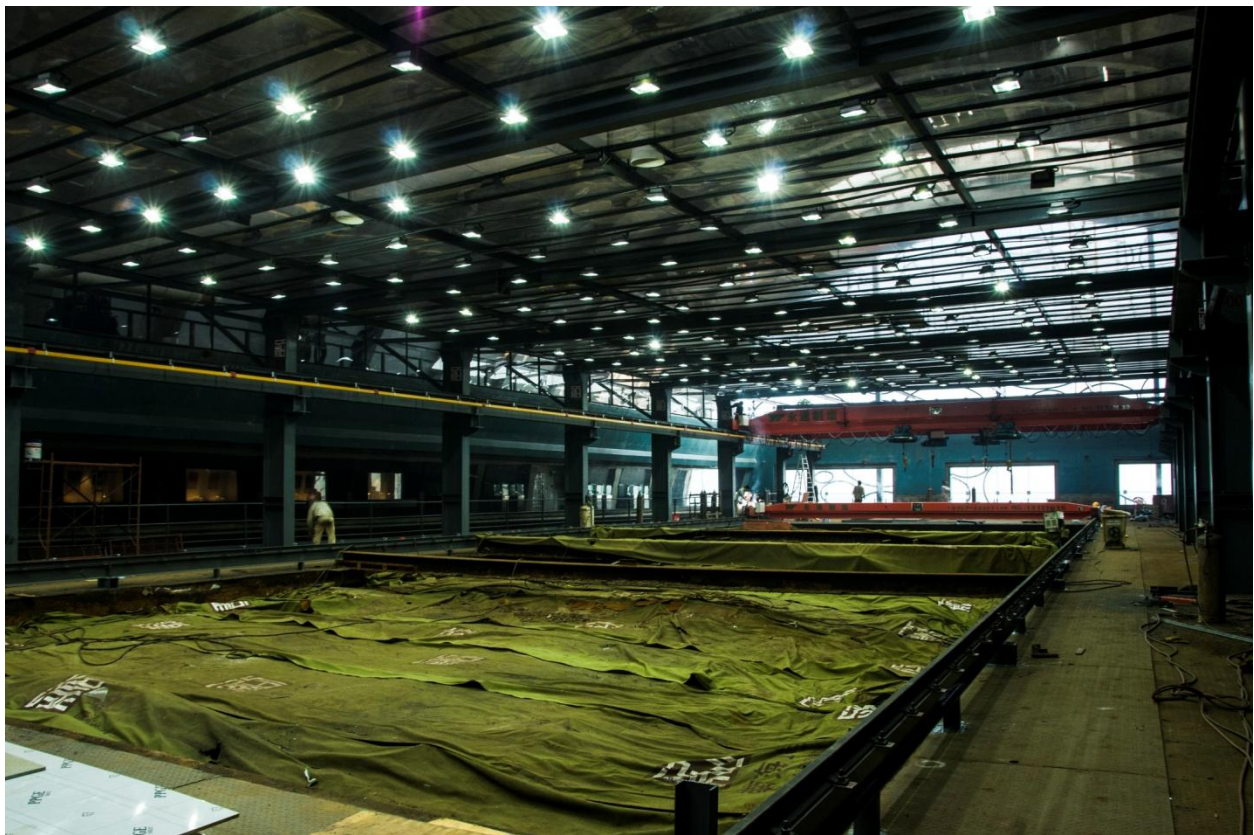


Fig. 5 “Nanhai I” Shipwreck inside Maritime Silk Road Museum of Guangdong. (National Center of Underwater Cultural Heritage)

### **Fight against Commercial Speculation and Trade**

Chinese government actively carries out underwater cultural heritage protection;

meanwhile contribute to manage multi-sectorial cooperation, to crack down on destruction of the underwater cultural heritage, such as looting activities. Due to the flourishing of antiques market in China and worldwide, the illegal activities such as smuggling and looting of underwater cultural relics have gone from bad to worse among Chinese coastal areas.



*Fig. 6 Brown Glazed Porcelain from "Nan'ao I" wreck site. (National Center of Underwater Cultural Heritage)*

To relieve the serious situation, Chinese government has taken a variety of methods. In recent years, in Hainan, Guangdong, Fujian province, the local police uncovered several crimes on underwater cultural heritage. For instance, in Pingtan county of Fujian province, the local police uncovered 11 cases of relics crimes, detained 40 people believed to be involved in the operations, and recovered 1700 pieces of historical artifacts, namely porcelain. In 2010, Chinese State Administration of Cultural Heritage and the State Oceanic Administration signed "The cooperation framework agreement of underwater cultural heritage protection", the two sides will jointly carry out eight aspects actions, such as underwater cultural heritage protection strategy and planning, underwater archaeology, underwater cultural relics law enforcement patrol and so on. At the same time we also actively explore the integrated use of modern technology, including GPS, GIS and RS technology, security and monitoring technology. In 2010, for example, we launched China's first underwater cultural heritage monitoring security pilot project – Banyang reef I unmanned monitoring system, in which Buoy monitoring system, sit bottom monitoring, the anti-frogman sonar and unmanned aerial vehicle cooperative monitoring, 3G network monitoring, passive sonar underwater monitoring technology solutions were proposed (Fan, 2013). At the same time the system discussed the combination of technology defense and human defense, as well as the improvement of laws and regulations. The system laid a solid foundation of underwater cultural heritage monitoring, to strengthen the importance of



security monitoring work in underwater cultural heritage protection.

## **Conclusion**

Currently, more than a hundred wreck sites have been located in Chinese waters. Several submerged ancient town remains and burial sites were also discovered. UCH conservation is entering into a promising new stage of expansion and transformation. We can summarize this process into five aspects:

1. Academic and practical development from underwater archaeology alone to sophisticated UCH conservation and management (Ding and Fan, 2013);
2. Working area getting from foreshore to coastal waters then to high seas;
3. Projects implementation starting to include more stakeholders, departments and organizations;
4. UCH conservation turning from academic and governmental behavior into a business involving the public;
5. Developments emphasizing on diversified and in-depth international cooperation

Through years of learning, comparison and practical experiences, one has to admit that China has done quite a good job in preserving its underwater cultural heritage resources. However, problems also exist. Firstly, top-down system and professional training makes UCH conservation easy to manage. But traditional maritime culture and outdated legal protection somehow negatively affect our work. Secondly, the concept of underwater archaeology and underwater cultural heritage has not been clearly defined, which led to bias in actual field work. At the same time, ideas and philosophies of the Convention have not draw enough attention in Chinese academia. Third, in terms of research method and theories on UCH conservation and management, there is still a big gap between Chinese and advanced international standards. Meanwhile, diving skills received too much attention from professionals. Balance should be achieved although current results are encouraging. Finally, in spite of being a focus of attention worldwide, China's UCH conservation and management works have not become an organic component of this multinational field of study. By now, China's policy towards UCH conservation is "centered on coastal areas, underline inshore waters, start surveys in internal waters and prepare for high seas. China sincerely hopes to facilitate more

international cooperative projects, and to actively take part in the global UCH conservation campaign.

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### **Endnote**

<sup>1</sup>See English version here: [http://www.sach.gov.cn/art/2007/10/29/art\\_1591\\_58336.html](http://www.sach.gov.cn/art/2007/10/29/art_1591_58336.html)

<sup>2</sup>See English version here: <http://www.law-lib.com/lawhtm/1989/6039.htm>

<sup>3</sup>See website here: <http://www.sach.gov.cn/>

<sup>4</sup><http://www.msrmuseum.com/index.aspx>

<sup>5</sup><http://www.qzhjg.com/>

<sup>6</sup><http://www.cqbhl.com.cn/>

<sup>7</sup>See: <http://www.msrmuseum.com/index.aspx>

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### **Biography**

**Fan Yiran** worked as a news reporter, and started to cover live broadcast of underwater cultural heritage conservation fieldwork since 2000. She changed her career later in 2005 and stepped into UCH business in 2009. She is now working in the National Center of Underwater Cultural Heritage as the director of the general office. Yiran is the first female underwater news reporter in China. And after her transformation into an underwater archaeologist, she participated in various UCH conservation projects including "Nanhai I" and "Nan'ao I" wreck sites and has led series of UCH survey project in Liaoning, Tianjin and Hebei.

