

**Lantau Conservation Fund**  
**Priority Conservation Themes**

**A. Nature Conservation**

**1. Species**

**I. Understudied taxa groups on Lantau that have potential conservation concern**

Different species have different ecological roles in an ecosystem, and their co-occurrence and interactions are the result of thousands of years of evolutionary coordination. Conserving biodiversity is important to the existence and proper functioning of all ecosystems, and the continuous provision of ecosystem services to humans. However, most of the previous and current ecological studies of Lantau have been focusing on major taxonomic groups such as birds, butterflies etc., and there is a paucity of research on other taxonomic groups such as various invertebrate species other than butterflies. The conservation value of these understudied taxa groups is unknown but should not be overlooked in conservation work.

**II. Conservation on threatened, ecologically important or keystone species**

Human activities have imposed risks to and threatened many species with extinction. Many of them are rare, geographically restricted to a region and have specific habitat requirements, such as Romer's tree frog and horseshoe crab on Lantau. These species rely heavily on local efforts and well-designed measures for their conservation. Moreover, keystone species are critical to maintaining an ecological balance and proper functioning of an ecosystem, and their conservation is crucial to prevent ecosystem collapse. Therefore, recognising the impact and tailor-make conservation measures rooted in research evidence is of priority to stop further decline in the population of these ecologically important species in particular local or endemic species on Lantau.

**2. Urban Biodiversity**

Urbanisation is one of the major causes of biodiversity loss via habitat degradation and fragmentation. Modified habitats usually support a small community of generalist species of flora and fauna which in turn provide limited ecosystem services and aesthetic functions. Therefore, promotion of urban biodiversity and their long-term maintenance, via for example strategic planning and planting to increase habitat coverage, complexity and connectivity, has received increasing

attention. Integration of biodiversity components in urban setting or built environment has been recognised as beneficial to both ecological stability and social well-being, and as a proactive means to achieve a sustainable city. Given that some parts of Lantau are under rapid development, ideas for early implementation of biodiversity enhancement measures in the urbanized areas and assessment on their effectiveness on bringing environmental and social benefits, in particular to local communities, will be conducive to the sustainable development of the island.

### **3. Ecosystem Services of Key Habitats on Lantau**

Ecosystem services (ES) are regarded as the benefits from ecosystems to the mankind. They are classified into four broad categories, including *provisioning*, such as production of food and water; *regulating*, such as control of climate, flood and disease; *supporting*, such as providing living spaces for plants and animals and maintaining species and genetic diversity; and *cultural*, such as aesthetic inspiration, cultural identity and spiritual well-being. Comparing with the conventional biodiversity survey, the concept of ES suggests another assessment approach for habitat evaluation. Given that relevant studies of ES on Lantau are scarce, building up knowledge in the ES provided by key habitats in the four categories will enable thorough understanding on their ecological and social significance and uniqueness from a novel and enlightening perspective, in particular their benefits to local communities. The scientific information will be useful for implementing management strategies and prioritizing conservation effort on different habitats, as well as enhancing public awareness and support on conservation.

## **B. Cultural Conservation**

### **1. Village Traditions of Lantau**

Lantau consists of numerous villages and their rich culture. Traditions of these villages includes oral traditions and expressions, performing arts, social practices, rituals and festive events, knowledge and practices concerning nature and the universe, traditional craftsmanship etc.

For example, stilt house construction technique, a kind of traditional craftsmanship, is unique in Tai O. There are also other types of village traditions commonly found on Lantau, such as Hakka Cha Kwo, dragon dance etc. Oral legends related to settlements on Lantau over hundreds of years, for instance, the migration of their founding ancestors, village establishment and the formation of local geomancy, are encouraged to be documented and studied.

## **2. Military Built Heritage of Lantau**

Lantau is situated at the mouth of the Pearl River estuary, which was the main passage for maritime trade to and from China during the Qing dynasty (1644-1911), and possessed a great strategic importance.

For example, Fan Lau Fort on Lantau was built in early 18<sup>th</sup> century, together with Nan Tou Fort and Chi Wan Fort in Shenzhen were once the most important coastal fortifications in Xinan County. Tung Chung Fort was constructed in the first half of 19<sup>th</sup> century and served as naval headquarters of the Right Battalion of Dapeng. With reference to the Guangdong Annals, two military forts were built in the 22<sup>nd</sup> year of Jiaqing reign (1817) at the foot of the Rocky Lion Hill at Tung Chung, and in 1980, the remain of a battery was discovered on a hill slope facing the sea near Tung Chung Pier and is referred as “Tung Chung Battery” nowadays. Fan Lau Fort, Tung Chung Fort and Tung Chung Batteries were declared as monuments in the 1980s.

The military importance of Lantau continued and transformed during the Second World War period (WWII). Constructed in the 1920s to 1940s by the Yuen family, the East and West Watchtowers of Yuen’s Mansions in Mui Wo are rare local existing examples of rural medium-size residential blocks with ancillary buildings and watch towers. This group of buildings was confirmed Grade 2 historic buildings in 2009. These two watchtowers were once used by the Yuen family to safeguard home and Mui Wo by the attack of Japanese troops during the WWII. There are some other watchtowers built around 1940s on Lantau for defensive purpose against pirates, bandits and the invading Japanese. They include Watchtower in Luk Tei Tong built by the Tsangs, the Pak Mong Watchtower by the Kwoks, and one in Tai Ho built by the Cheungs.

These military buildings, dating from the early 18<sup>th</sup> century to 1940s, are important cultural heritage on Lantau and it is worth for further study on their historic and architectural values, and their roles in the history of Lantau.

## **3. Socio-Economic Landscape of Lantau**

Villagers on Lantau mostly utilized natural resources to earn a living and they produced a characteristic economic and cultural landscape on Lantau:

- Agricultural and fishery heritage on Lantau included rice cultivation, Kadoorie Agricultural Aid Association agricultural facilities, inshore and offshore fishing methods etc.

- Industrial heritage included hunting of natural resources which were once active on Lantau: mines such as silver mines in Mui Wo could be dated back to late Qing dynasty; salt pans in Tai O at its heyday in the first half of 20th century; wolframite mines in Sha Lo Tung reputed as the “best mining area” in 1952; dairy production started in Tai Shui Hang on Lantau by the Trappist Haven Monastery in the 1950s with the influence by western culture.

Different types of agricultural, fishery and industrial heritage on Lantau contribute to Lantau’s own economic and cultural landscape. By having more focused studies on this theme, their development over times and relationship with the village communities can be explored in depth.

#### **4. Rural Village Settlement on Lantau: Formation, Configuration and Associated Components**

The village settlement on Lantau could be dated back from late Ming dynasty, and continued in Qing dynasty upon the full lifting of the Evacuation Order in the mid to late 17<sup>th</sup> century. The area occupation and development of rural villages were highly related to the use of natural resources, socio-economic development, building technique, religions and folk traditions.

Rural village settlements on Lantau have more than 200 years to a few decades of history. A holistic research on individual village settlements to study the cultural heritage under the “point-line-plane approach” is highly valuable. According to the findings in the cultural and historical studies of Sustainable Lantau Office, Civil Engineering and Development Department, the villages were usually formed according to their home towns, for instance, Punti (本地) or Hakka (客家). Up to this day, the structures (pattern / configuration) of some villages are still clear where village features like shrines and wells can still be found. Hence, the correlation among the origins of the villagers, their settlement history on Lantau, the spatial utilization through time and the subsequent cultural heritage, both tangible and intangible, as identified in the villages are worth to be further explored through detailed studies.

Meanwhile, a number of historic buildings and structures, which are tangible cultural heritage, are components of the “point-line-plane” in village settlement. For examples, village houses, temples and shrines, architectural features, boulder trackways, old bridges located in these villages have rich historical and heritage values and are reflecting the rural lives in the past. Some of them are facing challenges of aging populations, structural deterioration, increased

threats from environmental changes and development pressures. There is a need to document, consolidate and analyze existing conditions; and to propose methods for restoring, conserving, and revitalizing these precious built heritage and cultural landscapes.