

THE ISSUE

The popularity of recreational clam digging in Hong Kong has increased in recent years. Mudflats or sandflats in the city, for example at Pak Nai and Ting Kok in the New Territories and Tung Chung Bay, and Shui Hau Wan on Lantau Island, teem with hundreds of weekend and holiday visitors, primarily looking to collect clams.

Shui Hau Wan faces high levels of disturbance from recreational activities such as paragliding and clam digging on the intertidal mudflats. Unregulated clam digging is a serious concern, can destroy the egg masses of the endangered Chinese horseshoe crab and lead to juvenile horseshoe crabs being trampled. It may also change the composition and density of the benthic community structure and the availability of prey (such as polychaete). Large Asiatic hard clam have all but disappeared due to this unsustainable activity. The litter left behind by clam diggers pollutes the environment, and increases the chance of animals being entangled and killed. Shui Hau was listed as a marine refuse priority site in 2015.

Despite the ecological consequence, there are no statutory regulations for clam digging in Hong Kong, unless the activity takes place within the boundaries of an existing marine park. Currently only 5% of Hong Kong waters are designated or planned as marine protected areas (MPA) by 2023.

WHAT WE ARE DOING

To reduce anthropogenic impact and encourage sustainable use of marine resources, WWF launched the city's first clam conservation management measures in 2018. WWF worked with academics and Shui Hau residents to develop a self-regulating code of conduct for clam digging and develop a set of tools to reduce its negative impact.

The code of conduct could be applied to all clam digging sites in Hong Kong. The rules and how they help preserve the ecology are:

- Release small clams to grow and reproduce;
- Collect clams only for your own consumption, as overharvesting causes population decline;
- Use less destructive equipment, such as small hand-held shovels;
- Backfill clam holes to help the disturbed substratum to recover more quickly and prevent other organisms that have been dug up from being exposed to predators or heat stress;
- Avoid digging in sensitive areas, such as the mangrove area and rivers, to avoid disturbing or injuring non-target organisms, such as trampling on juvenile horseshoe crabs;
- Respect biodiversity – do not hurt or disturb horseshoe crabs and other marine creatures;
- Be alert when the tide rises for your own safety;

- Leave no trace – anything left on the mudflats will become marine litter which can cause wildlife entanglement or can block the animal’s digestive tract once ingested.

To support the first item in the Code of Conduct, WWF has produced clam gauges designed for five of the most commonly harvested clam species at Shui Hau. Clam gauges set a minimum size for harvested clams. They are an effective interim conservation measure and are simple to use. By limiting the size of clams being harvested, clam gauges protect the young clams that are essential for the continued growth of the population. The gauges also contain essential information on identifying different clam species by their shape and marking. Gauges have been used to regulate clam harvesting in other countries and prevent the exploitation of marine resources.

To raise awareness of the need for long-term sustainable use of coastal resources, WWF-Hong Kong has organised a series of eco-visits to Shui Hau, and a citizen science ecological survey. The eco-visits aim to increase understanding of the area’s ecological importance, and promote the clam digging code of conduct. The ecological survey is in support of our work to produce:

- a baseline survey on the ecological health of Shui Hau;
- an inventory of mudflat species, particularly clams; and,
- a map that covers the area’s biodiversity by April 2020.

OUR ASK

Our call to the government to protect and conserve at least 30% of waters in Hong Kong effectively by 2030 includes Shui Hau as an area of top priority for immediate action, considering that the mangroves and intertidal mudflats support high biodiversity and serve as an important spawning and nurse ground for horseshoe crabs.

WWF’s suggested conservation measures for Shui Hau are:

- Designate Shui Hau Wan and Pak Nai as a marine park with zoning that give the most ecologically sensitive area strict protection and allows regulated activities in the outer zone;
- Implement measures to protect horseshoe crabs, including no take zones and partial closures during breeding season;
- Implement measures to protect clams, including partial closures spatial/seasonal and licenses or a quota system;
- Adopt a co-management approach, provide public facilities (e.g. boardwalk on mudflats and educational signs); and,
- Develop marine litter source reduction strategies, arrange weekly clean-ups to ensure the cleanliness of the mangrove and wetland environment.