

**For discussion on
28 May 2018**

Legislative Council Panel on Environmental Affairs

**Latest Progress of the Protection of
Endangered Species of Animals and Plants in Hong Kong**

PURPOSE

This paper updates Members on the latest progress of the protection of endangered shark species, as well as measures to conserve Green Turtle and Incense Tree in Hong Kong.

BACKGROUND

2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international treaty which aims to protect that the international trade in specimens of wild animals and plants does not threaten their survival. The HKSAR Government protects endangered species of both animals and plants as set out in the three Appendices to CITES through the implementation of the Endangered Species of Animals and Plants Ordinance (Cap. 586). The Endangered Species of Animals and Plants Ordinance provides that, unless otherwise specified, a license is required for the import, introduction from the sea, export, re-export, possession or control of the species (including their parts and derivatives) listed in the Schedule 1¹ of the Endangered Species of Animals and Plants Ordinance.

ENDANGERED SHARK SPECIES

Existing Trade Control

3. Currently, eight species of sharks² are listed in Appendix II to CITES and scheduled under the Endangered Species of Animals and Plants

¹ Schedule 1 to the Endangered Species of Animals and Plants Ordinance sets out the species listed in Appendices I, II and III to CITES.

² They are the Great White Shark, Basking Shark, Whale Shark, Oceanic Whitetip Shark,

Ordinance. Under the Endangered Species of Animals and Plants Ordinance, all import and export/re-export of scheduled specimens must be accompanied with a valid CITES permit. The international trade of these eight species of sharks (including fins and other parts or derivatives) is allowed under permits which will be issued only when the species are legally acquired and the trade is sustainable. A possession license is however not required for local possession of fins and other parts or derivatives of scheduled shark species.

Recent CITES Listing

4. At the 17th meeting of the Conference of the Parties, Parties decided to list four more shark species³ in Appendix II to CITES. A legislative exercise has been initiated to amend the Endangered Species of Animals and Plants Ordinance to put these species under regulation. We will submit the proposed amendments to the Legislative Council for negative vetting as soon as possible.

Enforcement

5. The Agriculture, Fisheries and Conservation Department (AFCD) and the Customs and Excise Department (C&ED) work closely together to strengthen the detection of the illicit import of shark fins into Hong Kong. The two departments conduct joint operations from time to time to inspect seaborne container cargo of shark fins from overseas countries. In the joint operations conducted by the two departments in 2017, about 1 700 kg shark fins of Oceanic Whitetip Shark and Hammerhead Shark without permits in five containers from India, Egypt, Kenya and Peru respectively were seized. AFCD and C&ED will maintain the momentum to fight against the illicit trade in endangered shark species.

Publicity and Education

6. Hong Kong has no fishery targeted at sharks. Shark fins are mostly imported. There are about 500 shark species and most of them are not controlled under CITES. CITES recognises that commercial trade may be beneficial to the conservation of species and ecosystems or to the development of local people when the levels are not detrimental to the survival of the species in question. Along with this principle, CITES does

Scalloped Hammerhead Shark, Great Hammerhead Shark, Smooth Hammerhead Shark and Porbeagle Shark.

³ They are Common Thresher Shark, Pelagic Thresher Shark, Bigeye Thresher Shark and Silky Shark.

not ban the international trade in CITES-listed shark species.

7. To take the lead and set a good example in the promotion of green living that goes beyond the minimum expectation in the law, the HKSAR Government promulgates internal guidelines on adopting conservation-conscious menus, including no shark-fin, in official entertainment functions. In addition, the HKSAR Government strives to raise public awareness of the conservation of endangered species through education and publicity, with a view to promoting the conservation and appreciation of wildlife and protection of endangered species. Education and publicity programmes include setting up of an Endangered Species Resource Centre, making announcements through the mass media and the internet, organising public exhibitions as well as distributing advisory leaflets to traders, tourists and the public. AFCD has also been contacting key stakeholders, including shipping and logistics companies, reminding them to observe the requirements of CITES and the Endangered Species of Animals and Plants Ordinance.

CONSERVATION OF GREEN TURTLE

Background

8. Green Turtle is the only sea turtle species that regularly nests locally. The nesting season of local Green Turtle lasts from June to October each year. Every few years, mature Green Turtles travel a long distance from their foraging grounds to breeding areas. After mating, female Green Turtles come ashore to their natal beaches at night to lay one clutch of eggs at a time. Each clutch comprises about 100 eggs. Female Green Turtles lay three to seven clutches of eggs at an interval of 12 to 14 days during the nesting season. The hatchlings have low survival rate in the wild, and it generally takes a Green Turtle over 20 years to reach sexual maturity. Sham Wan on Lamma Island is the only site in which a very small population of Green Turtles has been recorded to nest regularly in the territory.

Species Action Plan for Green Turtle

9. AFCD has been implementing a Green Turtle Species Action Plan (SAP) since 1998 with various conservation measures to protect Green

Turtles and their nesting site. These include listing Green Turtle as a protected wild animal and designating its nesting site in Sham Wan as a Restricted Area under the Wild Animals Protection Ordinance (Cap.170), carrying out patrol, monitoring and habitat management of the nesting site, undertaking scientific studies, removing abandoned fishing nets, conducting publicity and education, as well as making regional and international collaboration. AFCD is updating the Green Turtle SAP for its enhanced conservation.

Protection and Management of Sham Wan

10. In order to minimise disturbance to Green Turtles as well as their nests and eggs during the nesting period, the 0.5 hectare sandy beach of Sham Wan was gazetted as a Restricted Area under the Wild Animals Protection Ordinance in 1999. Access to Sham Wan beach is restricted from June to October each year. Unauthorised access to the Restricted Area is liable to a maximum fine of \$50,000. AFCD conducts regular patrol to control unauthorised activities and monitor the conditions of the nesting site. Before the onset of the nesting season each year, AFCD carries out management work at the beach including removal of weeds and refuse that may hinder the movement of nesting Green Turtles.

11. The sandy beach of Sham Wan and the nearby shallow water were designated as a Site of Special Scientific Interest in order to recognise the scientific and conservation importance of the area for Green Turtles. Furthermore, the entire bay area in Sham Wan is a Speed Restricted Zone for vessels designated by the Marine Department with a speed limit of 5 knots. This helps protect Green Turtles from being hit by vessels navigating in high speed. To avoid entanglement of Green Turtles at Sham Wan, AFCD also carries out underwater survey for abandoned fishing nets at the bay and arranges removal of the abandoned fishing nets and other marine debris if necessary.

Surveillance

12. To enhance the monitoring of Sham Wan Restricted Area, AFCD will deploy a surveillance camera system during the restricted period since 2018. The surveillance camera system will enable remote monitoring of the conditions of the beach and nesting activities of Green Turtles through an online platform so that additional manpower could be

deployed promptly.

Regional and International Cooperation

13. Green Turtles are migratory species that inhabit different regions at different stages. In this connection, regional and international cooperation is important to the conservation of the species throughout its life history. Regular contacts with the regional and international authorities, experts and institutes are maintained to implement the management measures and to exchange up-to-date intelligence and experience relevant to sea turtle conservation. AFCD have tracked the foraging grounds of Green Turtles that nested in Sham Wan and for the wild released sea turtles after rehabilitation through satellite. Genetic analysis has also been done to study the sea turtles' affinity to different populations. The findings from these studies are important for formulating appropriate management measures with other conservation authorities in the region for the better protection of sea turtles.

CONSERVATION OF INCENSE TREES IN HONG KONG

Background

14. Owing to the high commercial value of agarwood, Incense Trees have been illegally felled for harvesting of agarwood. Based on the information provided by the Hong Kong Police Force (Police), the enforcement cases involved mostly two-way permit holders and it is thus believed that the agarwood is destined to be offered for sale in the Mainland. To tackle the illegal harvesting of Incense Trees by offenders in the territory, enforcement has been stepped up and a series of enhanced measures have been adopted in the past two years. While sporadic illegal felling of Incense Trees was still reported in different regions of Hong Kong such as Sai Kung, Sha Tin, Sha Tau Kok, Tai Po, Lantau Island, Lamma Island and Hong Kong Island, the number of such cases is showing a downward trend after the implementation of the targeted enforcement measures. The number of cases of illegal felling of Incense Trees in the past five years is at **Annex 1**.

Legislative Control

15. In Hong Kong, Incense Tree is protected under the Forests and Countryside Ordinance (Cap. 96). Under this ordinance, any person who unlawfully fells or damages any Incense Tree on Government land is liable to a maximum penalty of \$25,000 fine and one-year imprisonment. The species and habitats of Incense Trees in Country Parks and Special Areas are also protected under the Country Parks Ordinance (Cap. 208) where cutting, picking or uprooting of any plants including Incense Tree, or digging, cultivating or disturbing the soil in these protected areas is liable to a Level 1 fine (\$2,000) and to imprisonment for three months. Depending on the circumstances of individual cases, the Police may also initiate prosecutions under section 29 of the Theft Ordinance (Cap. 210) against persons who illegally harvested Incense Tree in Hong Kong, which imposes a heavier penalty with a maximum penalty of 10 years' imprisonment. Import, export or re-export of Incense Tree specimens, including agarwood, without a CITES permit is also an offence under the Endangered Species of Animals and Plants Ordinance. In order to impose a stronger deterrent effect and demonstrate the Government's determination to combat the smuggling of animals and plants, the maximum penalty for offences involving a CITES Appendices II and III species, including Incense Tree, has been increased to a fine of \$1 million and seven-year imprisonment after the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 came into force on 1 May 2018.

Species Action Plan for Incense Tree

16. AFCD has drafted a SAP for Incense Tree to iron out a series of measures to enhance the efforts to deter illegal harvesting of Incense Tree and to ensure its survival in the territory. Under the SAP for Incense Tree, AFCD has established a special task force to arrange risk-based patrols so that extra efforts could be allocated to black spots of illegal tree harvesting. Surveillance of important specimens at strategic locations has been enhanced by deploying Infrared Sensor Camera Trap in the countryside. Joint operations between AFCD and the Police have also been enhanced, and both departments have strengthened collaboration with the residents living in the vicinity of Incense Tree to enhance intelligence exchange and facilitate early detection of illegal activities. Metallic tree guards and mesh fences have also been installed to provide a secured barrier

against felling/vandalism of 71 large and mature specimens. Other measures include boundary control enhanced communication with relevant Mainland authorities, replanting in the countryside, scientific studies, long-term monitoring, as well as publicity and education. Details of the SAP for Incense Tree are at **Annex 2**.

WAY FORWARD

17. The Government will continue to review the Endangered Species of Animals and Plants Ordinance from time to time to cope with the latest decisions of CITES and local situation. Members are invited to note the Government's measures to protect endangered shark species, Green Turtle and Incense Tree in Hong Kong.

Environment Bureau
Agriculture, Fisheries and Conservation Department
May 2018

Annex 1**Numbers of Incense Trees Illegally Felled in 2013 – 2017**

Year	Number of cases	Number of persons arrested	Number of prosecutions	Number of Convictions	Penalties (Months of imprisonment)	Weight of wood harvested / Number of trees felled
2013	96	41	21	18	24 – 45 months	133 kg / 168
2014	134	65	26	26	3 – 55 months	283 kg / 240
2015	120	16	5	3	30 – 35 months	106 kg / 249
2016	54	22	8	5	2 – 30 months	216 kg / 172
2017	53	9	1	1	30 months	94 kg / 102

Conservation Measures for Incense Tree

Risk-based Patrol

To strengthen enforcement against illegal felling of Incense Tree, AFCDD has set up a special task force since May 2016 to allocate extra efforts to patrol the sites at which important populations of Incense Tree are present. A risk-based approach is adopted such that the locations of the damaged and intact trees are mapped using a geographic information system (GIS) software to identify healthy populations and black spots, for planning and prioritising patrol efforts based on the degree of threats. When signs of irregularities are found, the patrol team reports the case to the Police promptly for further investigations.

Surveillance in the Wild

AFCDD is conducting a pilot scheme on 24-hour surveillance using the Infrared Sensor Camera Trap (IRSCT) to monitor Incense Trees at several strategic locations. Any human activities close to the target trees would trigger the IRSCT to send pictures instantly to a control room for initial screening. If suspected illegal activities are captured by the IRSCT, the control room would inform the Police and AFCDD so that timely enforcement operations could be arranged.

Boundary Control

In the past five years, AFCDD has conducted 16 training sessions to help frontline staff of the Police and C&ED to identify Incense Tree / agarwood and detect illegal activities. In addition, the fragrant nature of agarwood may serve as a clue to allow detection by trained dogs. AFCDD is conducting a pilot scheme to deploy quarantine detector dogs to facilitate detection of agarwood smuggling at land control points.

Communication with Relevant Mainland Authorities

AFCDD, C&ED and the Police have stepped up joint efforts to strengthen export control and intelligence exchange with the enforcement agencies of the Mainland to combat smuggling of items derived from Incense Trees. AFCDD has contacted its CITES counterpart in the Mainland, drawing their attention to the matter and requesting them to liaise with their relevant agencies to step up enforcement actions. An

enforcement training workshop to further strengthen the collaboration between the enforcement agencies from the two sides will be held in July 2018.

Protection for High-Risk Specimens

Large mature Incense Trees are more often the victims of illegal felling/vandalism as they are more likely to produce resins upon wounding. AFCD has been installing metallic tree guards and mesh fences to provide a secured barrier for these high-risk trees. AFCD also conducts wound dressing for the damaged trees in peril with anti-fungal paint to suppress the formation of agarwood and hence discourage illegal harvesting.

Artificial Propagation and Replanting

AFCD has made efforts to maintain a high production of Incense Tree seedlings. Approximately 10 000 seedlings were planted annually each year over the past eight years (2010-2017). The seedlings have been extensively planted in country parks and various secure locations.

Scientific Studies

AFCD also encourages and supports relevant research studies that could enhance the conservation of Incense Tree. For example, studying inter-population genetic variations of Incense Trees within Hong Kong and between Hong Kong and nearby areas could potentially inform compensatory planting and facilitate law enforcement. AFCD has also been working with an academic institution to conduct trial tree surveys using aerial drones.

Long-term Monitoring

To track population status of local Incense Trees, AFCD has conducted numerous field surveys over the years and has recently started to install microchips for tagging large mature trees (i.e. high-risk trees) for long-term monitoring. These microchips can be readily detected by receiver probes and hence allow rapid location of the tagged trees in the countryside. The data gathered from the surveys are integrated into the GIS mentioned above in order to conceive patrol strategy.

Publicity and Education

AFCD has included tree protection in its regular education and publicity programmes targeting students and the public. A poster titled “No Unauthorised Tree Felling” has been published and displayed at various Visitor Centres and information boards of country parks. Copies of the poster were also distributed to various District Offices for displaying on notice boards. Propaganda materials on the subject have also been distributed to all land boundary control points for display. Over the past few years, AFCD has also provided funding support for non-governmental organisations to launch education programmes to promote conservation of Incense Tree.