

SHARKS





to full-sized fins.

Sharks has always been central to the projects in BLOOM HK. With the success in 2016's CITES CoP17 in listing four new shark species onto Appendix II of the Convention, the work of Customs at the local ports can be expected to become more challenging, as the chances of illegal trades increase.

New tools for capacity building

In this year, BLOOM HK has continued to develop tools to further the regulation and management of the shark fin trade in Hong Kong. Partnering with the Stony Brook University, BLOOM HK has been promoting a DNA identification protocol for shark fins and shark related products, using a real-time PCR machine developed by the Stony Brook Univeristy, to the Customs and Excise Department of Hong Kong. The machine provides a far more time-efficient and economic alternative to the conventional DNA sequencing technique, and supports the visual identification method already used by local customs officers. It is intended for this method to be added to the customs inspection protocol.

The CITES CoP will be held in 2019. Together with other local and international NGOs, BLOOM HK will begin to prepare for new species to be proposed for listing.







Research Paper Launch: What's for Sale? Tracing the species composition of Hong Kong's shark fin retail market through DNA genetic analysis

On 31 October, 2017, BLOOM HK partnered with The University of Hong Kong to host a press conference, presenting the findings of the shark fin retail market DNA study completed in partnership with Florida International University, Stony Brook University and Kadoorie Farm & Botanic Garden. The study tested more than 4,800 shark fin samples purchased from Hong Kong's dried seafood market by DNA analysis, and found at least 76 shark and ray species sold as shark fin. These included hammerhead sharks, oceanic whitetip shark, shortfin mako shark LegCo members Elizabeth Quat and and many other species known to be threatened with extinction.



Hui Chi Fung as distinguisehd guests



market through DNA genetic analysis "

The fight against wildlife crime

In June 2017, after months of work from local NGO groups, penalties for illegal trades involving CITESlisted products were finally revised to reflect the severity of the crimes. This achievement set the scene for the upcoming work for Hong Kong to update legislations and laws surrounding the trade.

BLOOM HK believes that one of the key actions is to educate legislators, politicians and lawmakers on the often downplayed severity and implications of illegal trades and crimes. As a tool for this mission, BLOOM HK created the "Wildlife Trade 2.0: Connecting to the Future" (also referred to as the "Red Booklet"), which includes eight policy suggestions and goals for Hong Kong. The objective of the suggestions is to urge for reviews and updates of the local legislations surrounding wildlife trade, so that they may keep up with how the trade has evolved over the years.

In the coming months, BLOOM HK will be lining up projects to move the policy suggestions forward, engaging, raising awareness both among local citizens and Legislative Council members.

The DNA study report and the Red Booklet can be accessed through BLOOM HK's website.

SEAFOOD TRADE



Live Reef Food Fish Trade

On 01 February, 2018, local NGO ADMCF and The University of Hong Kong's Swire Institute of Marine Sciences (SWIMS) launched the report, "The Trade in Live Reef Food Fish: Going, Going, Gone". As a co-author to the report, BLOOM HK contributed key insights on the trade status of important Live Reef Food Fish (LRFF) species.

The report highlights the extent of illegality currently present in Hong Kong's LRFF trade and the urgent need for its sustainability before key species disappear. The report makes several recommendations, including calls for traceability and monitoring of LRFF imports into Hong Kong to be enhanced.

The report can be found on ADMCF's website: www.admcf.org

Wet Market Surveys

BLOOM HK completed a survey comissioned by ADMCF of three of Hong Kong's key wet markets selling LRFF. The study provides a snapshot of species abundance and diversity of LRFF in local wet markets, including insights into the most commonly encountered species, and the prevalence of hybrid species, such as the Sabah grouper. Up to 17 threatened and near threatened species were recorded from January to June 2017.

As an output from the project, a "wet market guide" to the most commonly encountered LRFF species will be produced, likely available by mid-2019.

Humphead Wrasse project

From June 2016 to May 2017, BLOOM HK collaborated with The University Hong Kong to complete a project inleuding monthly monitoring of



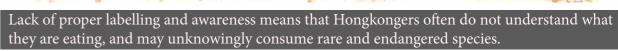
A press launch was held for the report. Left to right: Stan Shea (BLOOM HK), Prof. Yvonne Sadovy (SWIMS) and special guest Prof. Daniel Pauly.

Humphead wrasses (*Cheilinus undulatus*; "HHW" for short) for results comparison with previous data collected by the IUCN Groupers and Wrasses Specialist Group, a turnover rate study in seafood restaurants, managing the community engagement page HK Humphead Wrasse Watch and conducting quesionnaires about Hong Kong citizens' knowledge of HHWs and related conservation issues. While the import and posession of HHWs in Hong Kong are regulated, individuals continue to make frequented appearances in tanks of seafood restaurants, suspectedly from illegal sources. Further research and awareness-raising are found needed.

Dried Seafood - Sea Cucmber?

Concern for dried seafood outside of shark fins has been growing, including a local favourite - sea cucumbers. This will likely take more focus in BLOOM HK's work in 2018 to 2019.





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LOCAL BIODIVERSITY

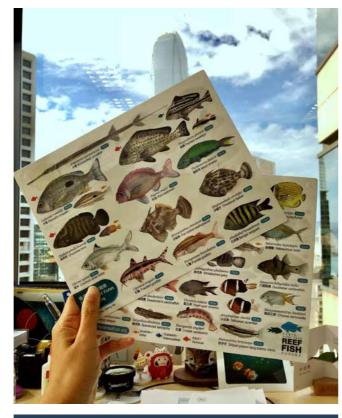
Hong Kong's oceans carry rich biodiversity, with reef fishes comparable to the Caribbean Sea. Today, local fisheries no longer thrives as they did in the past. A key task for local biodiversity conservation is to help Hong Kong rediscover its love for its seas.

Since 2014, BLOOM's 114°E Hong Kong Reef Fish Survey has been collecting data on the reef fishes that frequent our waters. The data will provide baseline knowledge on what species we have and where they occur. This information will also be usable for further scientific and academic research, but also inform environmental impact assessments (EIA) and assist in the formulation of marine biological hotspots (areas of high biodiversity) and the establishment of Marine Protected Areas (MPAs).

So far, the survey has recorded at least 19 species that have not previously been documented to appear in Hong Kong, making them important discoveries. The details are published in the peer-reviewed journal, Marine Biodiversity Records.

Ocean-Friendly Legislations

As part of Hong Kong's Biodiversity Strategy and Action Plan (BSAP), the Hong Kong government will be conducting regional assessments of the conservation statuses for selected marine species. BLOOM HK will be providing data and acting as reviewers for marine fish species. The resulting list of species will inform future legislations as an indication to the vulnerability of local marine species.



As part of the effort to connect with recreational divers and the general public, the 114°E Survey created underwater fish identification plates featuring Hong Kong's most frequently encountered species. It is the first reef fish identification plates produced for Hong Kong, usable by all and any local diver.





Data collected from the 114°E Survey will also be a key source of information for the assessment of reef fishes.

114°E Hong Kong Reef Fish Web-Portal

The 114°E Web-Portal will be an online platform showcasing Hong Kong's reef fish diversity, informed by the data gathered from the 114°E Survey.

Key features of the 114°E Web-Portal includes a reef fish species search engine and database, containing profiles of close to 400 speices of reef fishes found in Hong Kong waters. For each species, information related to their visual identification, morphological features, behaviours and interesting findings in past research will be displayed. Photographs of different phases and appearances of each species will also be accessible by users.

Key survey sites in Hong Kong will also be introduced

We would like to express our sincerest gratitude to the Swire Group Charitable Trust for supporting the continued development of the 114°E Hong Kong Reef Fish Survey, and to our growing volunteer team for their dedication to the project!

@114EHKREEFFISH

with written descriptions and photographs. The objective is to provide an online resource that is usable by not only scientists and academics, but also accessible to the general public as an educational tool. It is hoped that through the 114°E Web-Portal, the beauty of Hong Kong's reef fishes can be made known.

This year, the 114°E Web-Portal has been soft-launched with over 100 species completed. A full launch is expected in mid-2019.



HONG KONG'S

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MOST
FREQUENTLY
ENCOUNTERED
SPECIES
2017/18



















EDUCATION & MEDIA

Education and knowledge sharing has always been one of the core areas of work for BLOOM HK. Through different platforms, whether in the field, in a studio or in the classroom, BLOOM HK is dedicated iin spreading the message for the need for conservation of our oceans.

Pictured below are some of the opportunities that BLOOM HK has had the pleasure of taking up, including LUSH LIVE Central, reef fish identification training seminars, media interviews and wet market tours, press event of the shark fin DNA study research paper launch, visit to Taiwan reef fish research teams and university seminars. BLOOM HK's programmes are ready to cater for audiences from all walks of life.























PUBLICATIONS

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This report was prepared by Kathleen Ho, BLOOM HK All photos in this report are provided by Stan Shea, BLOOM HK unless credited otherwise.

THE HONG KONG



Stan Shea Marine Programme Director, Hong Kong

Stan is the most long-standing member of BLOOM Association Hong Kong. Joined in 2009, he is the face and steer of all of BLOOM's projects in Hong Kong, whether in research, advocacy or outreach. He believes strongly in spreading the message of conservation as a key step in protecting the oceans. To date his seminars have reached over 10,000 individuals worldwide.

Stan holds a BSc in Environmental Sciences from Oxford Brookes University and a Master's degree in Ecology and Biodiversity from The University of Hong Kong.



Kathleen Ho Marine Pogramme Manager, Hong Kong

Kathleen joined the BLOOM Hong Kong office in January 2015, after obtaining a BSocSc degree in Geography and an M.Phil. in environmental ethics, both from The University of Hong Kong.

At BLOOM, Kathleen is chiefly responsible for managing ongoing projects of the marine programme, assisting with field research, engaging the younger audiences for information sharing seminars and communications.

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