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BLOOM ASSOCIATION HONG KONG
ANNUAL REPORT

COVER PHOTO // Allen To@114°E Hong Kong Reef Fish Survey

BLOOM ASSOCIATION HONG KONG
ANNUAL REPORT // 2020 - 2021

JANUARY 2022

Vision // Mission

To resist the fate of an overfished, barren ocean in the future, by proving that dedicated action can reverse the course of environmental and human tragedy. Giving a voice to the voiceless; ensuring that humanity has a future where children have food and fishermen have jobs, by restoring ocean ecosystems to their full biological capacity.



What We Do // BLOOM HK

ONE. SHARING WHAT WE KNOW

Bringing knowledge of the many problems and solutions to ocean conservation issues, both local and global, to people, both local and global.

TWO. RESEARCH

Creating new information and filling knowledge gaps about ocean conservation and the marine world by carrying out scientifically rigorous research.

THREE. CREATING THE FUTURE

Assisting Hong Kong's progression towards a future of better oceans and fisheries by working with governments in addressing marine issues.

FOUR. ENGAGING THE GENERAL PUBLIC

Engaging the public through creative media to spread the word about our work, and restoring a sense of personal responsibility to marine conservation in all levels of the general public.





SHARKS AND WILDLIFE

Key Features:

- Shark fin trade research
- CITES preparation and implementation
- Wildlife trade research

In the year 2020-21, the coronavirus pandemic continued to take hold of the world as many industries came to a standstill. With international travel greatly restricted, BLOOM HK focused on local projects to continue expanding the available academic knowledge on the dried seafood trade and consumption in Hong Kong, and educating stakeholders and members of the general public on how Hong Kong contributes to global marine resource use and conservation.

SHARK FIN TRADE RESEARCH

Research to understand the trade of shark fin in Hong Kong in collaboration with NGOs and experts continued into 2020-21, including monthly sampling from the local dried seafood retail market. The samples are prepared for undergoing DNA analysis to identify what species of sharks are present in the trade. Initial results from previous years have uncovered more than 70 species, including not only shark species but also rays and chimaeras. Several of these species were also found to be endangered species.

Continuing this research can advance the available knowledge of the global shark-related trade, not only for the use of NGOs, but also for academics and researchers in conducting further studies, and for informing recommendations on how Hong Kong's role in the global trade can be improved, such as through participating in sustainable trades and refusing to trade in species threatened with extinction.

CITES PREPARATION AND IMPLEMENTATION

Since new shark species were added into CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) at the previous CoP18 held in 2019, Hong Kong's regulations related to the trade of such species were automatically updated for local implementation. Through various research, BLOOM HK will continue to monitor the local shark fin trade and document trends arising from such added protection to species in the trade.

To answer commonly asked questions about Hong Kong's consumption of shark fin, BLOOM HK conducted a sociological survey to gain insight into what Hong Kong's citizens thought about the way that shark fin is consumed in Hong Kong. This is the third time that this survey was conducted, with the first survey conducted in 2009/10 and the second survey in 2014/15. Comparing the results of the three surveys revealed that more and more people supported the protection of sharks, and a declining importance of shark fin soup in meals where they are usually eaten (i.e. banquets). These results were disseminated in a press event, raising awareness among the general public for the willingness in the local people to do more for the protection of sharks.

WILDLIFE TRADE RESEARCH

Sharks are only one part of the global wildlife trade, and the crimes associated with the wildlife trade are amongst the most ludicrous of crimes. Hong Kong's role in global trade networks that may involve such crimes remains largely unknown and an area of academic study needing more research. Partnering with other NGOs and experts, BLOOM HK has sought to understand the wildlife trade and crimes through research, in particular the marine-related products, such as by extending the shark fin retail market DNA studies to look into whether or not some shark fins could have entered Hong Kong illegally. Findings can further the understanding for Hong Kong's impact on global marine ecosystems and marine life, and ultimately how we can better protect them.

Apart from the shark fin trade, BLOOM HK has also examined the sea cucumber trade, for which the international trade is now regulated. Research will shed light on whether or not the presence of those regulated species in the market will have been impacted by the new regulations.



A large, dark-colored grouper fish with white speckles is swimming in an aquarium tank. The fish is positioned horizontally, facing right. In the background, there are other fish and a sign with the word 'EXPOSE' visible. A semi-transparent dark blue banner is overlaid across the middle of the image, containing the text 'LIVE FISH & SEAFOOD' in large, white, sans-serif capital letters.

LIVE FISH & SEAFOOD

Key Features:

- IUCN Grouper Assessment Workshop
- Sustainable seafood: BLOOM HK x CRT

Hong Kong's per capita consumption of seafood is one of the world's highest, and the city is an important trade hub for live seafood. Despite the coronavirus pandemic, Hong Kong's live seafood tanks at restaurants remained filled with colourful live reef fishes as always. BLOOM HK took this opportunity to carry out local-based projects to focus on understanding how we can help Hong Kong move towards more sustainable consumption practices when it comes to seafood.

IUCN GROUPEER ASSESSMENT WORKSHOP - UPDATE

The IUCN Grouper Assessment Workshop was hosted online in May 2020 by BLOOM HK to bring together scientists in the region working on grouper research, and provide a platform for them to undergo expert-led training on conducting regional species assessments in line with IUCN (International Union for Conservation of Nature) standards.

In the months following the workshop's completion, the participants completed a total of 9 species assessments, which will be submitted to IUCN officially for review. Once published, these reviews will help to provide important updates for those species' conservation statuses in the region, greatly increasing the available knowledge and information available to scientists and academics for the assessed species and furthering the understanding for the chances of survival of species that are commonly consumed.

SUSTAINABLE SEAFOOD: BLOOM HK X CHOOSE RIGHT TODAY

ChooseRightToday.org (CRT) is an initiative by ADM Capital Foundation (ADMCF) for promoting and popularizing sustainable seafood in Hong Kong. The online platform provides a range of information, including identification, shopping and dining guides for where and how to find sustainable seafood in Hong Kong. It also provides content to help people understand the concepts behind sustainable seafood and what it is.


This year, BLOOM HK partnered with ADMCF to bring new updates to the CRT platform. Apart from revamping the website to bring all content up to date and improve usability, the partnership has also enabled a survey of Hong Kong's restaurants to find out how many indeed offer dishes with sustainable seafood on their menus. More than 20,000 restaurants and catering outlets were surveyed, providing useful information for consumers to find where they can have sustainable seafood meals and making such sustainable consumption choices more accessible to members of the general public. It also provides helpful insight into how sustainable consumption concepts can be taken further in Hong Kong, for the protection of marine resources in the long run. Results of the survey will be published later in the next year.



HONG KONG MARINE LIFE

Key Features:

- 114°E Hong Kong Reef Fish Survey
- 114°E Hong Kong Reef Fish Web-Portal
- Marine Protected Areas



In this year where travel and vacation-going were restricted, many people have turned to the local outdoors and seashores. Many are beginning to discover the beauty and diversity of Hong Kong's marine life, especially along coral communities where the most popular snorkeling and scuba diving sites are. BLOOM HK has continued to document Hong Kong's reef fishes to educate the public on the conservation value of our waters and coastal habitats.

114°E Hong Kong Reef Fish Survey

Piloted in 2014, BLOOM HK has continued to conduct underwater reef fish surveys through the 114°E Survey project, recruiting recreational divers as citizen scientists to document the local reef fish diversity. Throughout the years, the survey has documented more than 380 species of reef fishes across 80+ dive sites in Hong Kong, and discovered many species that are new to Hong Kong's official records. Some of these discoveries were published in peer-reviewed journal publications to further the understanding of those species' distribution in the region.

Apart from underwater surveys, the project has also conducted seminars this year for a variety of audiences, including an internal training for the survey's volunteers, as well as seminars for secondary school and university students, and for the general public including through the Royal Hong Kong Yacht Club and the Marine Parks and Marine Ecological Resources Webinar 2020 hosted by the Agriculture, Fisheries and Conservation Department of the Government of Hong Kong SAR (AFCD).

Apart from seminars, the project has also disseminated the knowledge gained from surveys through providing assistance in drafting educational materials for social media use by the AFCD on their Facebook page "Hong Kong Marine Classroom", as well as contributing in the production of the publication, "Field Guide to Indicator Species of Hong Kong Reef Check (Special Edition)".

One particularly noteworthy partnership completed this year was with the local environmental education NGO, Outdoor Wildlife Learning Hong Kong (OWLHK), where BLOOM HK was a supporter of their "ECF Hong Kong Ecology Board Game Ambassador Scheme". The programme guided students from tertiary education institutes to design and create board games that were both fun and educational, to teach players about the local ecology. BLOOM HK introduced Hong Kong's marine ecology during training sessions, and provided mentorship to students in the creation of their marine-themed board game, "Coral City".

114°E Hong Kong Reef Fish Web-Portal

The 114°E Web-Portal is the project's main channel of information distribution based on the knowledge gained from the 114°E Survey, including information on fish species discovered and surveyed dive sites. This year, BLOOM HK continued to maintain the 114°E Web-Portal to keep the available information up to date and adding new species recorded to the website, as well as monitoring notable findings submitted through the website as underwater photographs taken by users snorkeling or scuba diving in Hong Kong.

Marine Protected Areas

Part of the project's objectives for the 114°E Survey starting from 2020 is to educate the public on the importance of Marine Protected Areas (MPAs) in the conservation of marine life and habitats. Apart from spreading this message through seminars and education of the project's volunteer divers, BLOOM HK has also partnered with other local NGOs and academics to find areas for collaboration and data sharing, on how knowledge on MPAs in Hong Kong can be best promoted to both members of the general public and stakeholders of Hong Kong's marine resources.



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EDUCATION AND MEDIA

Key Features:

- Publications
- Seminars
- Media interviews

Education is a core part of BLOOM HK's work. Through seminars, media interviews, scientific publications and other collaborations for outreach, BLOOM HK strives to spread knowledge and awareness for marine conservation topics, to academics, students and members of the general public.

Seminars

BLOOM HK tailors seminars for all sectors on marine-related topics, the most popular of which are for shark conservation and local marine biodiversity. Some highlights this year include the Harbour School, and the Jockey Club Museum of Climate Change of The Chinese University of Hong Kong.

Media interviews

BLOOM HK always welcomes invitations for interviews. In more long-term projects, currently in the works is a video feature with National Geographic Society, likely to be released in early 2022.

PUBLICATIONS

Over the years, BLOOM HK has collaborated in academic research on various marine issues, pushing forward the extent of our knowledge on these topics. Some of these research are published in journals. Below are a selection:

Cardenosa, D., Fields, A.T., Babcock, E.A., Shea, S.K.H., Feldheim, K.A., and Chapman, D.D. (2020). *Species composition of the largest shark fin retail-market in mainland China*. Scientific Reports 10, 12914.

Cardenosa, D., Fields, A.T., Babcock, E.A., et al. (2020). *Indo-Pacific origins of silky shark fins in major shark fin markets highlights supply chains and management bodies key for conservation*. Conservation Letters, 14(3);e12780.

Cardenosa, D., Fields, A.T., Shea, S.K.H., Feldheim, K.A., and Chapman, D.D. (2020). *Relative contribution to the shark fin trade of Indo-Pacific and Eastern Pacific pelagic thresher sharks*. Animal Conservation 24(3), pp 367 - 372.

Cardenosa, D., Shea, S.K.H., Zhang, H., Feldheim, K., Fischer, G.A., and Chapman, D.D. (2020). *Small fins, large trade: a snapshot of the species composition of low-value shark fins in the Hong Kong markets*. Animal Conservation 23(2), pp 203 - 211.

Barcia, L., Argiro, J., Babcock, E.A., Cai, Y., Shea, S.K.H., Chapman, D.D. (2020). *Mercury and arsenic in processed fins from nine of the most traded shark species in the Hong Kong and China dried seafood markets: The potential health risks of shark fin soup*. Marine Pollution Bulletin 157, 111281.

Fields, A.T., Fischer, G.A., Shea, S.K.H., Zhang, H., Feldheim, K.A., Chapman, D.D. (2020). *DNA Zip-coding: identifying the source populations supplying the international trade of a critically endangered coastal shark*. Animal Conservation 23(6), pp 670 - 678.

Shea, S.K.H., and To, A.W.L. (2018). *Ocean fifteen: new records of reef fish species in Hong Kong*. Marine Biodiversity Records 11(24).

To, A.W.L., Shea S.K.H., and Conand C. (2018).

Trade patterns of beche-de-mer at the global hub for trade and consumption – an update for Hong Kong. SPC Beche-de-mer Information Bulletin 38.

Fields, A.T., Fischer, G.A., Shea, S.K.H., Zhang, H., Abercrombie, D.L., Feldheim, K.A., Babcock, E.A., and Chapman, D.D. (2018). *Species composition of the international shark fin trade assessed through a retail-market survey in Hong Kong*. Conservation Biology 32(2): 376-389.

To, A.W.L., and Shea, S.K.H. (2018). *Field guide to indicator fishes of Hong Kong Reef Check*. Agriculture, Fisheries and Conservation Department: Hong Kong.

To, A.W.L., and Shea, S.K.H. (2017). *Field guide to common reef fishes of Hong Kong*. Agriculture, Fisheries and Conservation Department: Hong Kong.

To, A.W.L., and Shea, S.K.H. (2016). *New records of four reef fish species for Hong Kong*. Marine Biodiversity Records 9(82).

Conand, C., Shea, S.K.H., To, A.W.L. (2014). *Beche-de-mer trade statistics for Hong Kong in 2012*. SPC Beche-de-mer Information Bulletin #34.

To, A.W.L., Ching, K.S.H., and Shea, S.K.H. (2013). *Hong Kong Reef Fish Photo Guide*. Hong Kong: Eco-Education and Resources Centre.

To, A.W.L., and Shea, S.K.H. (2012). *Patterns and dynamics of beche-de-mer trade in Hong Kong and mainland China: Implications for monitoring and management*. TRAFFIC Bulletin 24 (2), pp 65 - 76.

THE HONG KONG TEAM



Stan Shea
Marine Programme Director

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 Programme Manager

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.

FUNDS AND DONATIONS

BLOOM HK is grateful for everyone who supported our work this year. In alphabetical order:

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This report was prepared by Kathleen Ho, BLOOM HK
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