ANNUAL REPORT 22/23

BLOOM ASSOCIATION HONG KONG

Photo by: Yiu Wai Hong@114°E Hong Kong Reef Fish Survey

Large school of the commercially high-valued species Bigeye trevally, recorded inside the Hoi Ha Wan marine park following the phasing out of commercial fishing licences in several existing marine parks around Hong Kong.

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 by working with governments in addressing marine issues.

FOUR. ENGAGING THE GENERAL PUBLIC
Engaging the public to spread the word about our work, and restoring a sense of personal responsibility to marine conservation in all levels of the general public.

Cover photo by
Sam Inglise114°E Hong Kong Reef Fish Survey

SHARKS AND MARINE WILDLIFE

Sharks and the shark fin trade continue to be at the core of the work at BLOOM HK. The triumph for sharks at CITES CoP19 is a notable success in many years of hard work, but is also only the beginning of the next stage of work in the mission to ensure regulated trades.

CITES CoP19

The nineteenth meeting of the Conference of the Parties (CoP19) for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) took place during 14 - 25 November 2022 in Panama City, Panama. This CoP was the most significant yet for sharks, because Parties have put together proposals that together (including for Rhinobatidae, Sphyrnidae and Carcharhinidae) would place 90% of the shark fin trade detected in Hong Kong under trade regulations. The corresponding updates to local trade regulations in Hong Kong will come into effect in winter 2023.

Pre-CoP Workshops

In preparation for the CITES CoP19, BLOOM HK collaborated closely with NGOs and academics to disseminate available research about the shark fin trade and the species' need for regulation in the global trade to governments in key trading countries/territories. In these outreach events, governments were also introduced to various tools that were developed to assist the implementation of CITES shark listings to ensure that they were well-informed and up to date with the latest developments in the field.

This work has continued after CITES CoP19 and the listing of new sharks species, as implementation training workshops offered to help government build capacity for enforcement.

Real-time PCR machine developed by partner Mote Marine Lab for customs inspection use, introduced at CITES CoP19.

CITES CoP19 was a historic moment for sharks.

Fish maw (pictured here) and sea cucumbers (left) are also high valued and highly demanded products in the local dried seafood trade. Many species face threats from fishing pressures similar to sharks, but receive far less attention.

Sea cucumbers left out to dry in the sun by retail stores at the Sheung Wan dried seafood market.

Retail market research

Research to understand shark species found in the Hong Kong retail market through DNA identification continued. Results from past years of surveys were published in a peer-reviewed journal prior to the CITES CoP19 to bring attention to the species most prevalent in the trade.

In the next few years, BLOOM HK will explore the feasibility of extending the research to other key traders in the region, including Taiwan and Singapore.

Publication: Two thirds of species in a global shark fin trade hub are threatened with extinction: Conservation potential of international trade regulations for coastal sharks
https://doi.org/10.1111/conl.12910

Others in peril

Apart from sharks, BLOOM HK has also initiated surveys on the mobulid gill plate, sea cucumber and fish maw trades. While these have received less attention than shark fin in recent years, many of the species involved are faced with similar threats of extinction from exploitation. By gaining a better understanding for the trade status of these products, suggestions for conservation measures can be made in the next step.

A large diversity of sea cucumber can be found in Hong Kong's dried seafood market. More research is needed including to find out what species are involved.

Similar to the case of sea cucumbers, the species composition of fish maw are largely unknown.

LIVE FISH AND SEAFOOD

BLOOM HK continues to expand the work dedicated to the local seafood trade. Unlike for sharks, very few species in the global live fish and seafood trade are currently regulated for sustainability, and conservation concerns driven by local demand remain undefined.

The endangered Humphead wrasse is commonly spotted in the live seafood tanks of local seafood restaurants.

Research

Partnering with ADM Capital Foundation (ADMCF), BLOOM HK is undertaking trade data research for all seafood items traded through Hong Kong. The objective of the research is to gain an overview of Hong Kong's seafood trade, including on key trade partners and products traded. The research will also be a review of Hong Kong's regulations and practices related to the trade, and offer recommendations to improve traceability and sustainability.

Outreach: Seafood market tours

Sociological survey results in the past indicated that Hong Kong's consumers were open to consuming sustainable seafood and were unwilling to consume species threatened with extinction. However, awareness for which products involved endangered species were low. BLOOM HK conducted a series of seafood market tours this year at Sai Kung, introducing the commonly encountered fish species in seafood restaurants and wet markets, and helping consumers build a sense of awareness for what they are consuming when eating seafood.

The diversity of seafood available in Hong Kong's markets, and lack of legislation for accurate labelling, presents one of the key challenges for moving towards seafood sustainability.

Lobsters filled the tanks of seafood restaurants in Hong Kong. As Hong Kong is also a trade hub for live seafood, it also has the potential to be a gatekeeper for illegal trades.

Despite the popularity of live fish among consumers, difficulties in the accurate species identification of reef fish in markets by consumers still presents a challenge for finding sustainable options and avoiding threatened species.

Outreach: Gyotaku

As a way of further engaging members of the general public, BLOOM HK has partnered with Choose Right Today and Gyotaku In HK this year to hold sustainable seafood Gyotaku workshops. Gyotaku is a traditional Japanese method of documenting fish in print. Today, it has transformed into an art form, using real fish to create artistic prints.

The workshops started with a brief sharing about sustainable seafood and Hong Kong's progress towards sustainable seafood consumption. The artwork itself utilised only sustainable seafood species, as a way of helping participants gain a stronger impression of what these species look like, and further build an appreciation of fish outside of the context of "food".

@ChooseRightToday
@Gyotaku_In_HK

The workshops are suitable for all ages, creating awareness from a young age.

In addition to learning about sustainable seafood and some species easily found in the market, participants are able to bring home their artwork.

HONG KONG MARINE LIFE

In 2022, global leaders came together at the 15th meeting of the Convention on Biological Diversity (CBD), setting targets to have 30% of the world's marine and coastal areas protected by the year 2030. Hong Kong is a part of this commitment, but as of now less than 5% of its waters are protected as marine protected areas (MPAs).

114°E Hong Kong Reef Fish Survey

This year marks the ninth year of underwater surveys, and the project is just one year away from its goal of achieving a dataset of ten years for Hong Kong's reef fish.

One key achievement this year is the publication of thirty-one new reef fish species to Hong Kong records. This brings the total number of new records found through the underwater surveys to fifty, marking a 14% increase to Hong Kong's known reef fish list. These findings help us to gain a better understanding for not only Hong Kong's marine life, but also the species composition and distribution of the South China Sea.

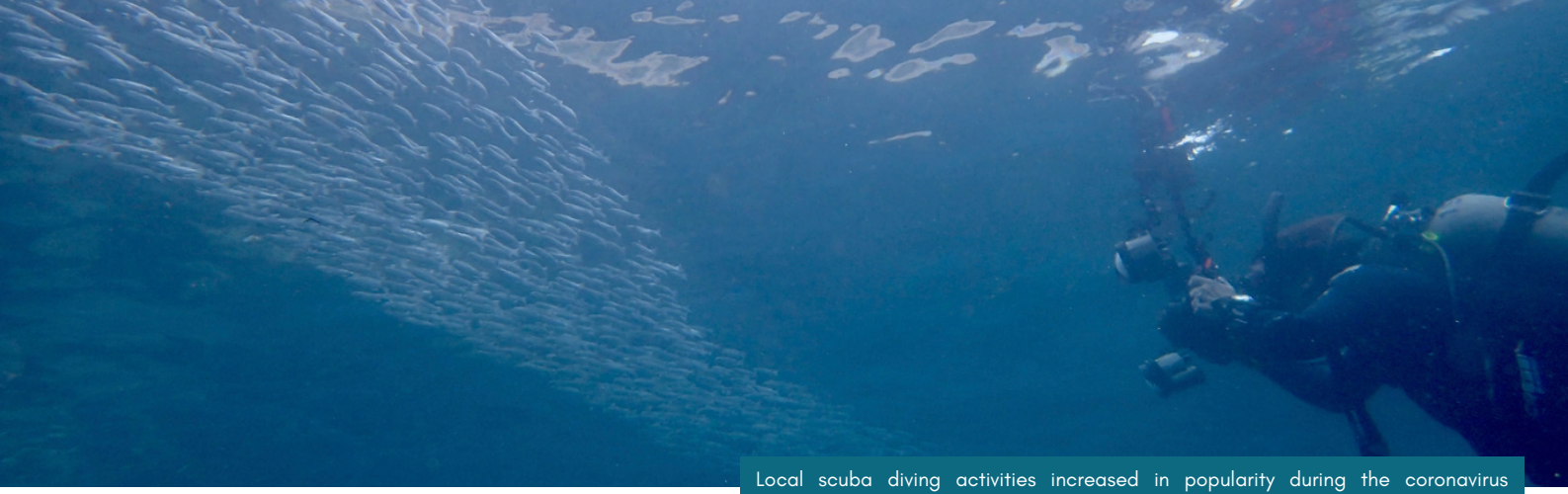
Publication: Thirty-one new records of reef fish species for Hong Kong waters
https://doi.org/10.1017/S0025315423000036

Outreach collaborations

The 114°E Survey was invited to collaborate with several unusual partners this year, including Teva footwear and CITIZEN watches (completed in the next year), enabling the project to reach new audiences.

Stan Shea was awarded the Pew Marine Fellowships 2023. In the next year, the 114°E Survey will receive additional support from the fellowship.

Trained volunteer surveyors enable the 114°E Survey's continuation year after year, collecting data and underwater photographs, and spreading the project's messages.



Local scuba diving activities increased in popularity during the coronavirus pandemic, presenting an opportunity to educate more people about Hong Kong's marine life, diversity and conservation value.

Marine Protected Areas (MPAs)

The Hong Kong Marine Protection Alliance (HKMPA) was launched in August 2022, as an alliance of local experts, academics and NGOs with the shared goal of better marine conservation for Hong Kong. As one of HKMPA's members, BLOOM HK continues to collaborate with others in the alliance to work towards having more areas of the local waters protected as MPAs. In the past year, efforts of HKMPA have focused on generating attention from the media and awareness among the general pubic for Hong Kong's marine diversity and the need for their conservation. This work will be stepped up in the next year, with recommendations for areas suitable for becoming the next MPA. Such recommendations will make use of the species and distribution data collected by the 114°E Survey.

Launch of HKMPA in August 2022. The Alliance has since grown to include over seventy members

Photo provided by Executive Counsel

BLOOM HK's Stan Shea is currently the spokesperson for HKMPA.

More citizen science

BLOOM HK was invited to collaborate on a citizen science project for the Hoi Ha Wan marine park, led by The Chinese University of Hong Kong (CUHK) and commissioned by the Agriculture, Fisheries and Conservation Department of the government of Hong Kong SAR. This is an important milestone, as it is the first time that the Hong Kong government has focused a citizen science activity solely for the Hoi Ha Wan marine park, one of Hong Kong's MPAs. The surveys for fish species has adopted the 114°E Survey methodology.

EDUCATION AND MEDIA

BLOOM HK believes that most people are willing to participate in conservation if they are educated on the issues and ways that they can meaningfully contribute to solutions. For this reason, in addition to research projects, BLOOM HK also values opportunities to conduct education programmes for diverse audiences.

Seminars can be tailored for all audiences.

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 Sustainable Seafood tours with the Swire Group and National Geographic Explorers.

Public seminar for local marine biodiversity, partnering with Hong Kong Maritime Museum.

Media

BLOOM HK always welcomes invitations for interviews. This year's highlights include with RTHK.

Collaborations

BLOOM HK believes that collaborations with others passionate about ocean conservation are an effective way of achieving greater impact. This year, notable collaborations include with large and small business brands such as Teva footwear and Hoya Kerry activewear.

Collaboration with Teva footwear on their Green & Blue Mission campaign

114°E Survey volunteers.

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. Below are a selection:

Chung, A., See, G., Lam, S., Yiu, W., & Shea, S. (2023). **Thirty-one new records of reef fish species for Hong Kong waters.** Journal of the Marine Biological Association of the United Kingdom, 103, E16. doi:10.1017/S0025315423000036

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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).**

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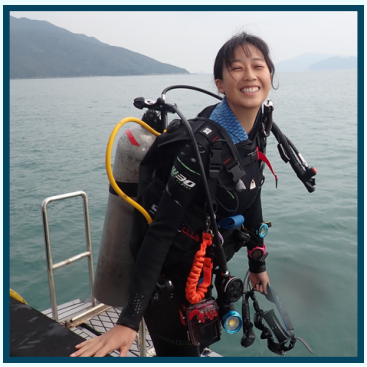
The Hong Kong Team

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 HK'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.

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. He is also a National Geographic Explorer and a Pew Marine Fellow.



Kathleen Ho
Marine Programme Manager

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

At BLOOM HK, 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: ADM Capital Foundation, International Fund for Animal Welfare, South Cross University, Swire Group Charitable Trust - TrustTomorrow, The Chinese University of Hong Kong, The Shark Conservation Fund of Rockefeller Philanthropy Advisors, Wildlife Conservation Society, the Anti-Epidemic Fund - Employment Support Scheme, other one-off donations and donors who wish to remain anonymous.

This report was prepared by Kathleen Ho, BLOOM HK
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