WWF

HONG KONG

ABOUT LIFE SEP 2025

CHAIRMAN & CEO MESSAGE

Since 1992, WWF-Hong Kong's *About Life* magazine has been a vital connection between the organisation and our members and supporters, chronicling our conservation initiatives alongside our journey to protect Hong Kong's precious natural environment.

After three remarkable decades in print, we are now proud to unveil an new all-digital format for *About Life*. This new strategic branding initiative reflects our continued commitment to innovation and sustainability, while dramatically improving accessibility and engagement in the digital age. Transforming *About Life* into a digital platform means breaking down barriers between our conservation work and the public – making our mission, values and stories more discoverable, shareable and enjoyable. This digital evolution represents our dedication to clearly communicating with our many different audiences, ensuring that our conservation messages reach and inspire Hong Kong's diverse community.

The new edition of *About Life* has an abundance of such messages. Take Lee Hysan Foundation's "Growing Mai Po" project as an example. Launched last year, the project revitalises rare rice paddy habitats, helping attract rare and endangered birds and other wildlife while implementing innovative smart hydrology management methods. The project also celebrates Hong Kong's cultural heritage and demonstrates the importance of collaboration to conservation. The project's success has been made possible through the dedication of our sponsor, along with stakeholders, academics, conservationists, community members, and our staff. This project shows that collective action can create lasting, meaningful environmental impacts, and we hope its success will inspire similar initiatives worldwide.

We also report on Mai Po Nature Reserve's prestigious Gold Star Wetland Centres award from Wetland Link International. The Reserve was one of only three centres in the world to receive this recognition, underlining Mai Po's significance to global wetland conservation and education. Other stories look at the new concept of ocean accounting, provide updates on our "Turning the Tides" project and more.

We hope the new digital *About Life* will reach more people than ever, helping our readers appreciate the importance of conserving nature and motivating everyone to get involved in protecting our natural wonders for future generations.

Enjoy reading!

Daniel R Bradshaw
Chairman, Executive Council of WWF-Hong Kong

Nicole Wong
Chief Executive Officer, WWF-Hong Kong

CONTENTS

Oceans · Mai Po & Wetlands · Wildlife · Green Cities · Local Biodiversity · Community Engagement & Education · Environmental Finance

ABOUT LIFE

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SEEDS OF REVIVAL: HOW GROWING MAI PO CONSERVES WETLANDS AND HERITAGE

The Mai Po wetlands are an ecological treasure – rich in biodiversity, steeped in heritage and home to *gei wais* and traditional rice varieties that once covered this rural landscape. Lee Hysan Foundation Growing Mai Po project embraces this legacy while using innovative solutions to address today's climate challenges. This feature brings together diverse project voices: A Project Manager, Sponsor, Agricultural Advisor, Bird Ringer, and Community Participant. Their collective stories reveal how collaboration and innovation are revitalising Mai Po's wetlands – fostering resilience, conserving wildlife and sustaining this extraordinary landscape for generations to come.

Enthusiastic volunteers celebrate a successful harvest in December 2024. Over 30 bird species have been recorded at the rice fields since the seedlings were first planted – evidence of the project's success in creating habitats for our avian friends!

Maggie Kwok
Manager, Wetlands Community Engagement, WWF-Hong Kong

As the Growing Mai Po (GMP) project manager, Maggie leads the work to integrate innovative smart technologies with traditional farming techniques to restore the rice paddy ecosystem. In this Q&A, she shares her insights on innovative ideas and adaptive strategies driving the restoration of the wetlands.

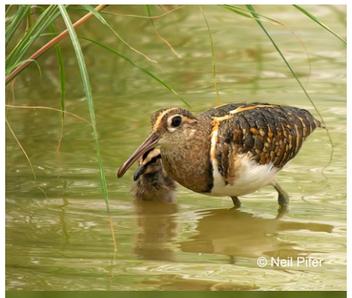
How does the project use technology to sustain the wetland ecology sustainability and encourage climate change adaptation?

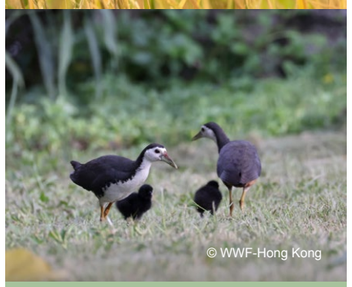
The Mai Po wetlands face challenges from extreme weather and a variable climate. We use smart technology to remotely monitor and manage water levels and other environmental conditions. The system includes smart pumps, water level sensors, solar panels, water quality monitoring devices, and surveillance cameras. These components work together through a networked control system to automatically adjust water levels, ensuring optimal conditions for our diverse wetland habitats.

In a pioneering partnership with the Hong Kong Observatory and local universities, we've deployed an IoT weather station using the Observatory's G-WIN technology that is linked to the Community Weather Information Network (CO-WIN). This first-in-Hong Kong innovation provides precise weather data that feeds directly into the water management system, helping the wetlands adapt to our changing climate.

1

A rice paddy field in late August 2024.





Since the first GMP seedlings were planted, several species have been recorded, including the endangered Yellow-breasted bunting, the Greater painted snipe, a species of local concern, and the White-breasted waterhen.

When restoring rice paddies, how do you balance conserving local intangible cultural heritage with modern ecological protection?

Restoring Mai Po's traditional tidal shrimp ponds (*gei wai*) requires honouring cultural heritage and meeting ecological targets. We've selected several local rice varieties for cultivation and to preserve genetic diversity and cultural relevance. These include the freshwater "Mei Yeung Jim" and "Fa Yiu Zai" varieties, and a less-common brackish water type called "Ham Mun".

We also adopt dual growing seasons – an early season in spring/summer and a late season in summer/autumn. This staggered cultivation strategy ensures that migratory birds like the Yellow-breasted bunting have access to food and habitat year-round. Our observations have shown that bird preferences are related to the physical structure of rice plants – upright freshwater rice plants are preferred by perching birds like buntings, while drooping brackish rice attracts ground feeders like White-breasted waterhens. We can actually tailor our planting to foster biodiversity!

2

How do you assess and monitor the project's impact on endangered birds and wetland biodiversity?

We conduct bird surveys twice a month and have recorded 39 bird species, including the target Yellow-breasted bunting. Partnering with the Hong Kong Bird Ringing Group, we ringed 97 birds last growing season to track populations and movements. These included ten Yellow-breasted buntings and four Greater painted-snipes, each one a testament to the GMP's positive impact.

Monthly crop height measurements guide adaptive management. Typhoons can damage crops, but planting diverse varieties builds ecosystem resilience. For example, choosing more storm-resistant rice species to ensure birds and insects have shelter during adverse weather.

3

Our colleagues working hard in contributing their efforts during a rice transplantation session in July 2024

Collateral efforts – Our local farmer works with closely our colleagues with sowing seeds for the late season crop in early August, 2025.

Are collaborations helping the GMP?

Our success is anchored in strong partnerships with academia and local experts. Professor Lam Hon-Ming from The Chinese University of Hong Kong advises us on seeds and research, while local farmers share practical knowledge of nursery cultivation and planting. This blend of science and tradition enhances ecological and agricultural outcomes.

4

This innovative smart hydrology system ensures optimal conditions for diverse wetland habitats and serve as a viable case study for smart wetland management.

The ambitious goals of the GMP: Recreate rare habitats for globally endangered wildlife and develop a proactive, viable management model using smart hydrology management. This is *Gei wai* #16B and its rice paddies.

How does the project promote public education and community engagement in wetland protection?

We use a multi-channel approach to raise awareness: educational panels near rice fields, guided school tours that include rice cultivation experiences, and Nature School programmes for families that cover the full farming cycle from planting to harvest. We also offer on-site corporate farming experiences. These initiatives deepen public connections to wetlands and create a conservation-conscious community.

5

What are the project's main challenges?

Rice paddy restoration is a complex process that is hindered by multiple factors such as weather, soil quality, intricate water management needs and many more. Our team conducts frequent monitoring and experimentation, and makes constant adaptive adjustments. We hope to gain more experience in the process and looking forward to sharing even more positive results as we move the GMP forward!

6

Cecilia Ho
President, Lee Hysan Foundation

Thanks to the support of Lee Hysan Foundation (LHF), our strategic partner and sponsor, the GMP project is underway. Established in Hong Kong over five decades ago, LHF drives transformative social impact for a better Hong Kong. We invited the Foundation's president, Cecilia Ho, to share her insight on their biodiversity conservation vision.

Why did you choose to support Growing Mai Po?

"Environment" is one of LHF's five key focus areas. This internationally-significant wetland is a habitat for endangered species and a crucial stopover site for migratory birds. WWF-Hong Kong's strategy to manage the Mai Po Wetlands through an intelligent water-level management system aligns with the Foundation's funding direction. Our support will strengthen resilience against climate change while providing a model for future conservation efforts in the Northern Metropolis development.

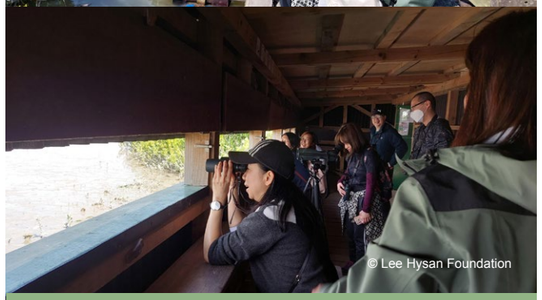
Building on this ecological foundation, we're also helping to revitalise Mai Po's rich cultural heritage through traditional rice cultivation. This approach honours the area's history while recreating vital habitats for endangered species. To ensure success, we've engaged Professor Lam Hon-Ming, an internationally-renowned agricultural expert, to advise on sustainable rice cultivation techniques.

What role do you think businesses should play in promoting environmental protection?

Businesses must serve as catalysts for environmental change. First, we need to "do more", by strategically investing in ecosystem transformation. At LHF, we support a community recycling initiative with two Hong Kong Housing Society estates, creating volunteer platforms that help residents develop sustainable waste habits. Second, we must "do better". LHF partners with a social enterprise to recruit elderly cardboard collectors, providing a safer working environment and stable income. Students join these elders as they sort plastics, fostering intergenerational connections. These dual approaches demonstrate how businesses can create meaningful environmental impacts while addressing social challenges.

Do you have any suggestions for future environmental corporate-community collaborations?

We take a "4Cs" approach to corporate-community collaboration. We believe that companies must Co-create solutions with diverse organisations; Connect resources and talent for mutual benefit; Collaborate across sectors to integrate different perspectives; and Co-fund initiatives by bringing together like-minded funders to amplify impact. This framework fosters genuine partnerships where businesses do more than support, they actively shape sustainable development alongside communities, creating lasting environmental and social value.



Guided by WWF-Hong Kong senior leadership, LHF project team conducts a site walk at Mai Po Nature Reserve in early 2025. The team appreciated the beautiful spectacle of bird migration from a bird hide (below), and strolled along the boardwalk, exploring deep into the mangrove forest.

After discussing project updates, LHF project team received festive decorations made from rice straw collected from a paddy, symbolising its importance to Hong Kong's local heritage.

Professor Lam inspecting rice crop seeds

How does restoring local rice cultivation in Hong Kong help preserve agricultural heritage and traditional knowledge and promote sustainable agriculture?

Bringing local rice cultivation back in Hong Kong means preserving our rich agricultural heritage and ensuring future sustainable food production. Historically, rice farming occupied up to 80% of Hong Kong's arable land. Extensively cultivated, it formed the cultural backbone of rural communities, particularly in the New Territories. Traditional farming practices and locally-adapted seeds embody generations of practical knowledge and community identity.

Despite significant pressures from urban development, farmland loss and the decline of native rice varieties that have adapted to local conditions, it is culturally and ecologically important to revive rice cultivation. Although primarily a heritage-focused endeavour, supporting this effort symbolises resilience, biodiversity preservation and a commitment to sustainable agriculture.

Given these challenges, how do environmental pressures and resource constraints influence the choice of rice varieties?

The main selection priorities are adaptability to the local soils and climate, and resilience to environmental stresses. Since most indigenous varieties have been lost already, seeds are sourced from germplasm banks and neighbouring regions – but only those suited to Hong Kong's conditions are chosen. Constraints like limited arable land and degraded soils restrict viable options, necessitating a focus on established, adaptable varieties rather than experimental breeds. This practical approach supports sustainable small-scale farming, aligns with green agriculture and carbon reduction goals, and ensures that rice cultivation remains viable.

How can rice cultivation support wetland conservation in Hong Kong?

Hong Kong's wetlands are valuable ecological habitats, particularly for waterbirds. Rice cultivation helps advance numerous conservation objectives. Cultivating rice in wetlands supports ecosystem food chains, promotes biodiversity and enhances wetland management work.

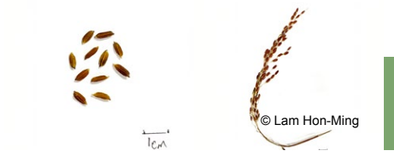
Choosing rice varieties suitable for wetland farming involves balancing agricultural productivity and ecological sensitivity. Challenges include ensuring that crop growth does not disrupt habitat quality, and making sure chosen varieties can adapt to unique hydrological conditions. This project highlights the potential of environmentally-conscious rice farming as a tool for wetland conservation, strengthening biodiversity while preserving agricultural heritage in these fragile ecosystems.

Professor Lam Hon-Ming
Choh-Ming Li Professor of Life Sciences, The Chinese University of Hong Kong

Mai Po, the literal translation of which is "rice harbour", is full of reflections from Hong Kong's rich agricultural past. But today, re-introducing native rice is a challenging prospect. Agricultural scientist Professor Lam Hon-Ming, our project advisor, shares his views on revitalising rice farming and returning indigenous varieties to their ancestral wetlands.

Local brackish rice seeds – "Ham Moon"

Freshwater rice seeds – "Mei Yeung Jim"



Freshwater rice seeds – local species "Fa Yiu Tsai"

Professor Lam visiting Sai Wan for the area's local rice cultivation project

Gary Chow
Chairman, Hong Kong Bird Research Institute (HKBRI)

Mai Po's rice paddy fields provide vital feeding and resting sites for migratory birds along the East Asian-Australasian Flyway. To monitor how these wetlands support bird populations and guide conservation efforts, we use bird ringing to track individual movements and biological information, e.g. age, sex, body fat, etc. Gary Chow, Chairman of Hong Kong Bird Research Institute (HKBRI), talks about the critical role bird ringers play in the project.

BIRD RINGING: A CRITICAL CONSERVATION TOOL

Bird ringing generally involves placing uniquely numbered metal bands on birds' legs to track migration patterns. Bird ringing experts undergo rigorous training and are granted a ringing permit from the Agriculture, Fisheries and Conservation Department, ensuring bird welfare and safety. Data collected at strategic locations during migratory periods and exchanged information among bird ringing groups in other places can support vital conservation research and wildlife management decisions.

How does bird ringing data enhance the effectiveness of the GMP project?

Long-term ringing data gives vital insights into migration strategies and habitat use. These findings inform adaptive conservation measures, ensuring Mai Po's paddy fields can serve as a stopover site providing suitable habitat and food sources for the targeted species. This evidence-based approach raises management standards locally and regionally, shaping policies that secure the future of birds and their wetland habitats.

Have any iconic migratory bird species been recorded through the GMP's bird ringing activities?

Yes! We have documented several remarkable migratory species, notably the Greater painted snipe, with medium threat of local extinction, and the critically endangered Yellow-breasted bunting. These species depend on our paddy fields – they are an essential stopover site during long migratory journeys. The carefully-managed freshwater habitats and rice paddies offer rich feeding and resting grounds, supporting buntings, snipes, and many other migratory species. Their consistent presence affirms the ecological value of actively managed habitats.

Bird ringers carefully extracting the birds trapped by the mist nets(nets made specially for bird ringing) and, shortly afterwards, place a small ring on their legs for individual identification and monitoring.

Bird ringers photographing the Scaly-breasted munia, ringed in a GMP survey on weekly-basis during the dry season.

How does bird ringing improve our understanding of the impact of rice cultivation on bird ecology?

Bird ringing is a fundamental tool that lets us track individual birds and understand their migration patterns, population trends and survival rates. By analysing ringing data, we can assess how conservation-focused rice farming benefits migratory species. For example, timing the rice harvest to align with peak migration ensures plentiful food resources. These findings help us refine habitat management and reinforce the importance of sustainable agriculture. Ringing also promotes international collaboration, since sharing records contributes to the protection of migratory routes across borders.

What special considerations are required for bird ringing in paddy fields?

Safety and accuracy are paramount. All bird ringers receive rigorous training and are granted a permit from Agriculture, Fisheries and Conservation Department for bird ringing. Birds are gently handled and swiftly processed: standard biometric data (e.g., weight and wing length) are collected, and each bird is fitted with a lightweight, uniquely-numbered ring before being quickly released. We closely follow stringent protocols to minimise stress, always placing bird welfare at the forefront of our fieldwork.

Learning by practice – Our little nature enthusiast Elly helps with paddy field maintenance

"Walking through rice paddies is no easy feat – it's like stepping into a natural 'ball pit', where every step is a challenge; except that falling in a rice paddy might leave you covered in mud – undoubtedly an exciting experience for adults and children alike. While children initially appear clumsy and need to hold their parents' hands when entering a field, they quickly adapt and are soon walking freely and pulling weeds from all around.

When caring for young rice seedlings, parents are often more anxious than their kids, as the little ones don't yet understand that a single misstep could break or uproot the growing seedlings, wasting all the previous planting and cultivation efforts.

Habitat diversity is crucial for ecological conservation. If we can invest resources in restoring farming to certain countryside areas, we can provide food and shelter for wildlife and teach children the "farm-to-table" process through hands-on agricultural experiences that cultivate an appreciation for food.

A short reflection: Parents can choose outdoor activities according to their own and their children's preferences. Such activities enhance family communication, reduce screen time and deepen understanding of each other's personalities and interests by completing tasks together.

Family farming fun: By participating in rice paddy experiences embedded in our education tours and "Nature School" programmes, parents and kids can gain hands-on experience with practical farming while nurturing their love for nature.

Shion Po
Founder of MeeliMami Parenting and her daughter Elly

The concept of "sustainable parenting" merges the joy of raising children with environmental stewardship, helping to instil life-long ecological values. By making conscious choices and leading by example, parents can nurture children who naturally respect and protect our planet. Taking kids on a rice farming experience blends environmental education and family bonding with a healthy outdoor activity. We invited Shion, founder of the popular parenting social media page "MeeliMami Parenting" to share her family's adventures with rice farming and explore the intersection of parenting and sustainability.

Elly assists Maggie as she measures the height of rice seedlings and records field data

As long as children don't resist too much, parents should encourage them to connect more with the natural world and appreciate the wonders of nature. This helps relieve stress, and nurtures gratitude, observational skills and empathy toward people and the environment – contributing enormously towards their moral development.

Bounded by high-rises makes it easy to overlook natural beauty and even become accustomed to pollution and environmental destruction. But if we guide children to explore nature from an early age through sensory experiences and field trips, protecting our precious natural world will become second nature to them.

OCEANS

VALUING THE BLUE: NEW RESEARCH CHARTS HONG KONG'S MARITIME FUTURE

The sustainable blue economy – a sustainable development approach that ensures ocean-based growth is ecologically sound and socially inclusive – offers Hong Kong a transformative path towards long-term prosperity and resilience. Recognising this, WWF-Hong Kong recently joined forces with two different institutions to chart the development of the city's blue economy. Together, we released three landmark reports earlier this year: "Valuing the Invaluable Blue", by WWF-Hong Kong; "Port 1.0 to Port 2.0", by HKUST; and "Blue Finance for a Blue Economy", by ADM Capital Foundation. Each report reveals ways that Hong Kong can reinvent itself as Asia's blue economy hub.

The three reports outline how Hong Kong can leverage its unique advantages: world-class financial infrastructure for mobilising capital, a strategic location with thriving and resilient ocean ecosystems that offer tremendous ecological and economic value to society, and a strong foundation of green maritime industries that supports innovation and sustainable development.

The WWF-Hong Kong study, conducted by the Chinese Academy of Sciences, quantifies for the first time the monetary value of the Greater Bay Area's coastal ecosystems – a Gross Ecosystem Product (GEP) worth a staggering RMB4.9 trillion, equivalent to over 35% of the area's GDP. Anchored in China's national standard for ecosystem valuation, this GEP assessment provides a common language to translate the benefits of nature into economic terms. It offers a new lens for understanding the true value of marine ecosystems and lays the groundwork for more informed, balanced policy and investment decisions.

"This valuation illustrates the critical, yet often overlooked, economic contributions of our marine ecosystems", said Lydia Pang, WWF-Hong Kong's Head of Oceans Conservation. "Comprehensive valuation tools helps guide smart investments, inform conservation budgets, and assess trade-offs in development — ensuring nature's value is factored into planning and development decisions."

The joint effort behind these reports brings together expertise from conservation, academia, and finance to kick-start Hong Kong's journey toward a sustainable blue economy. By integrating marine conservation, climate resilience, and sustainable maritime development, this collaborative approach enables smarter planning, targeted investment, and more balanced decision-making that recognises the true value of healthy ocean ecosystems.

If Hong Kong acts now, the city can secure its position as Asia's blue economy pioneer and redefine its maritime identity for future generations.

Lydia discusses *Valuing The Invaluable Blue*, a new report by WWF-Hong Kong

Read Report here

At the launching event, the experts discussed how Hong Kong can leverage global shipping reforms, blue finance and marine ecosystem valuation to lead Asia's sustainable maritime transition

From left to right: Christine Loh, Chief Development Strategist, Institute for the Environment at HKUST; Kate Martin, Sustainable Finance Consultant at ADM Capital Foundation; Sophie le Clue, CEO at ADM Capital Foundation; and Lydia Pang, Head of Oceans Conservation at WWF-Hong Kong

A GREEN GUARDIAN: WHEN ROYAL VISION MEETS ENVIRONMENTAL LEADERSHIP

In early June, WWF-Hong Kong hosted Her Royal Highness Princess Marie-Esmeralda of Belgium for an inspiring luncheon that celebrated natural beauty and environmental stewardship. The event launched the "Guardians of the Green" exhibition, a showcase of tropical rainforest photography by King Leopold III of Belgium, the princess' father.

The exhibition displayed black and white and colour photos of tropical rainforests taken by the late King Leopold III during his journeys to different parts of the world. The sovereign was passionate about nature and science, and was a pioneer in environmental protection. He was also a keen photographer, and his nature photos provide a unique 20th century perspective on the world's rainforests. Held from mid-May to late June at the Hong Kong Central Library, "Guardians of the Green" highlighted the beauty of these ancient forests, raising awareness about the persistent threats they face and the importance of tropical rainforest conservation.

The opening ceremony was followed by a luncheon and panel discussion. As a committed environmentalist following in her father's footsteps, the princess delivered a powerful address to the audience on critical global environmental challenges, particularly climate change and biodiversity loss. The panel led to meaningful dialogue with local experts, with important insights coming from WWF-Hong Kong's Conservation Director Dr Bosco Chan and One Earth Alliance Chairman Professor Poman Lo.

Moderated by WWF-Hong Kong Executive Council Member Irene Chu, the discussions focused on building a sustainable economy and mobilising collective action for environmental conservation. This prestigious gathering has helped solidify Hong Kong's position as a leader in global environmental initiatives.

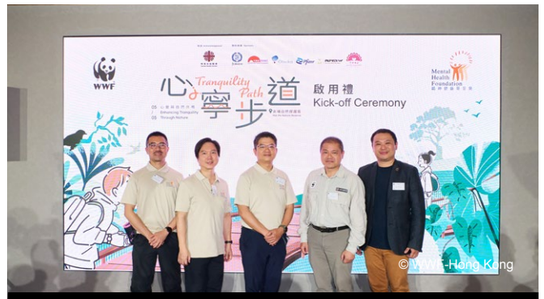
Guest speakers at the discussion panel chatted about meaningful ways to build a sustainable economy and promote collective conservation action.

Princess Marie-Esmeralda delivers her opening speech at the launch event for the "Guardians of the Green" exhibition.

NATURE MEETS MINDFULNESS: WWF-HONG KONG AND THE MENTAL HEALTH FOUNDATION PIONEER A GROUNDBREAKING NATURE WELLNESS INITIATIVE

In an innovative fusion of conservation and mental wellness, WWF-Hong Kong and the Mental Health Foundation (MHF) have created a "Tranquility Path" at Mai Po Nature Reserve. This first-of-its-kind nature wellness initiative transforms a portion of Hong Kong's cherished wetlands into a wildlife and human wellbeing sanctuary, offering people a refreshing urban wellness escape from the city's fast-paced lifestyle.

At a kick-off ceremony at the WWF Jockey Club Mai Po Peter Scott Visitor Centre in early May, the path was launched with a mission to enhance environmental conservation and human health. The event's distinguished guests included Dr David Lau, Chairman of MHF; Mr Stephen Wong, Vice-Chairman of MHF; Dr William Chui, Vice-Chairman of MHF; Mr Thomas Leung, Chief Operating Officer of WWF-Hong Kong; and Mr Yamme Leung, Director of Education of WWF-Hong Kong.



Official guests (from left to right): Dr William Chui, Vice-Chairman of MHF; Mr Stephen Wong, Vice-Chairman of MHF; Dr David Lau, Chairman of MHF; Mr Thomas Leung, Chief Operating Officer of WWF-Hong Kong; Mr Yamme Leung, Director of Education of WWF-Hong Kong.

A mindfulness exercise checkpoint along the Tranquility Path. Participants can scan a QR code to obtain exercise information and share their photos, reflections, and digital nature memories formed as they walk the path.

Research shows that spending time in nature significantly reduces stress levels and lowers blood pressure, while engaging in mindfulness practices enhances focus, reduces anxiety and improves sleep quality. The Tranquility Path combines these benefits through seven thoughtfully-designed checkpoints, each offering a unique nature mindfulness experience – from guided breathing exercises amidst the gentle rustle of reeds, to sensory awareness sessions that connect visitors with the Reserve's rich biodiversity.

To create a long-lasting impact, participants can capture their moments of tranquility through photos and reflections via WhatsApp. Months later, they receive a personalised video memoir – a digital reminder giving them ways to incorporate mindfulness into their daily lives. This innovative feature bridges the gap between a one-time experience and sustainable lifestyle changes, and fosters mental wellness and environmental consciousness.

The groundbreaking initiative has attracted substantial support from across society, reflecting a growing recognition of nature's vital role in nurturing human mental health.

"Enhancing tranquility through nature" was the theme of the launch event for Hong Kong's first-ever Tranquility Path, led by the Mental Health Foundation and WWF-Hong Kong.

The award was received by Christine Colvin (second from right), Water Policy Lead of WWF International, representing WWF-Hong Kong, alongside Simon Chan (second to left), Assistant Director (Conservation) of the Hong Kong Special Administrative Region's Agriculture, Fisheries and Conservation Department.

MAI PO NATURE RESERVE WINS GOLD STAR WETLAND CENTRE AWARD

For over 40 years, WWF-Hong Kong has been committed to preserving the integrity of Mai Po Nature Reserve through active daily management and public education. Over the years, we have worked to position the Reserve as a regional centre of excellence for wetland conservation, education and training. These efforts have paid off once again. On 27 July, our Ramsar-accredited wetland received another global recognition: the Gold Star Wetland Centre award from Wetland Link International (WLI), a global support network of wetland education centres.

The award is an accreditation scheme introduced in 2022 by WLI to recognise best practices in education and eco-tourism at wetlands. It is given every three years at the Conference of the Contracting Parties to the Convention on Wetlands (COP). This year, Mai Po Nature Reserve won the award for its excellent education programmes, advanced monitoring efforts, and collaboration with diverse wetland stakeholders. We are honoured that Mai Po Nature Reserve joins 15 other sites around the world in this year's award cycle. We are especially proud, as Mai Po was one of only three centres in the world to receive the Gold Star award.

The awards ceremony took place at the 15th meeting of the Conference of the Contracting Parties (COP15), held at Victoria Falls in Zimbabwe. Christine Colvin, Water Policy Lead from WWF International, attended the celebration on our behalf, remarking that, "This prestigious recognition affirms Mai Po's global significance in wetland conservation and education. It demonstrates the commitment to work with governments in valuing wetlands through prioritization, dedication, and innovation. Over four decades, Mai Po has been transformed from a landscape of traditional tidal shrimp ponds into a living classroom where education, research, and conservation seamlessly integrate. As one of only three Gold Star sites worldwide, this honour validates the holistic approach—balancing ecosystem protection with community engagement."

Simon Chan, Assistant Director (Conservation) of the Agriculture, Fisheries and Conservation Department who received the award on behalf of the Government of the Hong Kong Special Administrative Region, remarked:

"This Gold Star award is a testament to the collective dedication of many individuals and partners who have made Mai Po Nature Reserve a beacon of wetland conservation and education. None of this would have been possible without the unwavering commitment of our staff, the enduring partnership with WWF-Hong Kong—our co-manager of Mai Po since the 1980s—and the vital support of the government through subventions that enable WWF-Hong Kong to deliver impactful education programmes. Together with our local communities and volunteers, we have nurtured a shared vision: connecting people to nature through education, inspiring wonder, and fostering the next generation of conservation stewards."

Leaders and experts from different sectors shared their experiences of utilising technology for the benefit of the natural world, and discussed the many potential uses of AI for nature

AI FOR NATURE: WWF-HONG KONG AND UNU MACAU'S COLLABORATIVE APPROACH TO DIGITAL CONSERVATION

Representatives at the signing ceremony. From left to right, Mr Brian V. Gonzales, Head of Protection of Endangered Species at WWF-Hong Kong; Ms Nicole Wong, CEO of WWF-Hong Kong; Dr Jingbo Huang, Director of UNU Macau; and Dr Serge Stinckwich, Head of Research at UNU Macau

The MoU signing ceremony, "AI for Nature: Enabling Partnerships for Green Transformation", took place in Macau and was attended by experts and stakeholders from various sectors

During the fireside chat, Dr Carmen Or, Manager for Wetlands Research at WWF-Hong Kong (left), describes her experience leveraging AI to detect Eurasian otters in Mai Po, and how this contributes to otter research, monitoring work and habitat conservation efforts

Caleb Choi, Manager of Wetland Habitats at WWF-Hong Kong, presents how we utilise smart technology to enhance habitat health at Mai Po Nature Reserve

Taking a significant step forward for conservation technology, WWF-Hong Kong and the United Nations University Institute in Macau (UNU Macau) just formalised a partnership that promises to revolutionise environmental protection through digital innovation. On 2 July 2025, the two organisations signed a Memorandum of Understanding establishing a framework that will leverage cutting-edge technologies to address pressing conservation challenges.

This strategic agreement unites WWF's conservation expertise with UNU Macau's advanced digital technology research capabilities. It will focus on three critical areas: AI applications, policy innovation and knowledge exchange.

The AI applications component will involve joint research initiatives deploying AI solutions for wetland and ocean monitoring, biodiversity conservation and visitor management systems. Policy innovation will see sophisticated tools developed to combat wildlife crime and implement One Health approaches to global health challenges; and through knowledge exchanges, both organisations will build capacity for AI-driven technology to conduct wildlife monitoring and forecasting for zoonotic disease prediction and prevention.

The MoU signing ceremony, themed "AI for Nature: Enabling Partnerships for Green Transformation", took place at UNU Macau with leaders from both organisations sharing their vision of how this partnership will play out. The event showcased practical conservation applications for AI, including smart conservation initiatives at Mai Po Nature Reserve. A fireside chat brought together experts from various sectors, including the Bank for International Settlements Innovation Hub, KPMG, ATOS, UNU Macau, and WWF-Hong Kong. Their conversation centred on AI and how it can enable cross-sector teamwork, ethical considerations and future opportunities.

"Digital technologies have remarkable potential, particularly in terms of conservation and combating the illegal wildlife trade", said Ms Nicole Wong, CEO of WWF-Hong Kong. "In recent years, we have successfully deployed smart solutions using Internet of Things and AI that are enhancing our wetland and marine conservation work and helping us devise new wildlife crime prevention tools", she continued.

Dr Jingbo Huang, Director of UNU Macau, emphasised the school's commitment to advancing digital technology research, training and education for sustainable development, and highlighted the importance of global cooperation to address challenges, especially in the Global South.

Under the MoU, both organisations will actively cooperate via collaborative research initiatives, seminars, workshops, and conferences, demonstrating how advanced technologies can enhance ecosystem monitoring and management to produce effective conservation outcomes.

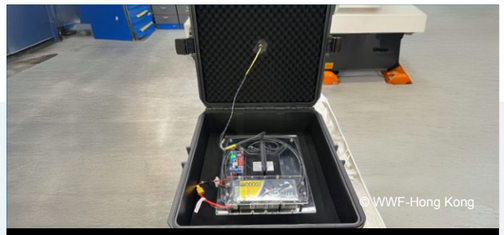
The significance of the WWF-Hong Kong-UNU Macau partnership extends far beyond technological applications. As established yet evolving cities at the intersection of technology and environmental issues, Hong Kong and Macau are uniquely positioned to demonstrate how AI-driven solutions can transform conservation. By addressing local and regional environmental challenges, this partnership can be an example to the world of how innovative tools can help fight biodiversity loss and climate change.

TURNING DIGITAL TIDES: SMART SOLUTIONS FOR MARINE DEBRIS

Launched in December 2023, WWF-Hong Kong's "Environment and Conservation Fund Turning the Tides – Underwater Surveys, Clean-ups and Beyond" project tackles marine plastics through citizen science programmes and cross-sector stakeholder engagement. In addition to the Ocean Health Survey, the project's "Oceannovator" pillar unites diverse stakeholders to develop innovative recycling solutions for marine litter.

After identifying challenges like storage limitations and high costs, WWF-Hong Kong partnered with four specialized teams to develop innovative solutions for underwater litter tracking and ghost net recycling. Here's what they created:

Solution 1



Special RFID sensor created for ghost net detection

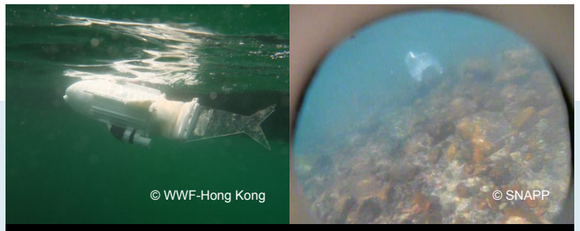
Using RFID technology to track ghost nets

Partners Enviridis Technology Company Limited; Prof. Leung Yuk Frank LAM at HKUST and his research team

This project is exploring the feasibility of using Radio-Frequency Identification (RFID) in Hong Kong's marine environment, using advanced technology to improve detection and retrieval efficiency, thus reduce entanglement risks for marine life and microplastic pollution caused by abandoned fishing nets.

Initial tests demonstrated that RFID tags installed into the floats of fishing nets are detectable, but current range is limited to within one meter. The research team is now actively working to improve the detection range.

Solution 2



SNAPP, the robotic fish, searching for marine debris in Tolo Harbour

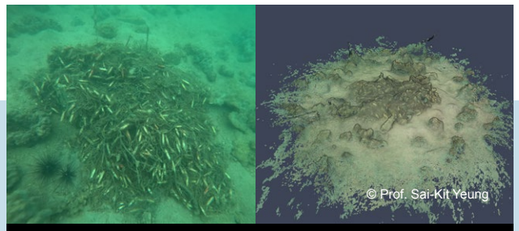
A suspended plastic bag spotted by SNAPP

Shallow water screening of marine debris using robotic fish

Partners SNAPP Ocean Data Solutions Limited; Engineering students from HKU

The team utilized the agile SNAPP robotic fish to search for suspended marine debris, including ghost fishing nets. In an energy-efficient manner, SNAPP facilitates quick and effective marine litter collection and visual surveys with its equipped sensors and cameras. Already it has successfully recorded various types of marine debris along the Tolo coastline, from floating plastic bags to abandoned fishing nets.

Solution 3



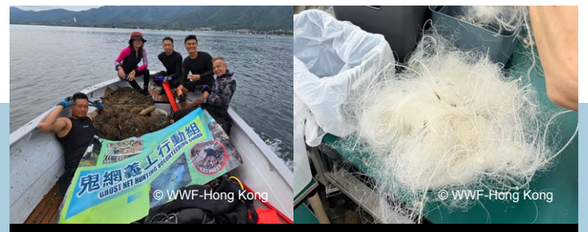
Reconstructed 3D structure of a sample ghost net sighted underwater

Marine litter and coral mapping using photogrammetry technology and AI-based object identification

Partners OTG OnTheGo Limited (underwater drone operator); HKUST Prof. Sai-Kit YEUNG and his team (photogrammetry)

Photogrammetry converts 2D footage into detailed 3D underwater maps. Using drone footage, this technology enhances AI accuracy for object identification while documenting underwater ecosystems. The team mapped selected sites along the Tolo coastline in 3D, identifying corals and ghost nets, as well as their size, form and condition, revealing marine litter's impact on the respective coral communities.

Solution 4



The Ghost Net Volunteer Action Team working in Tolo Harbour

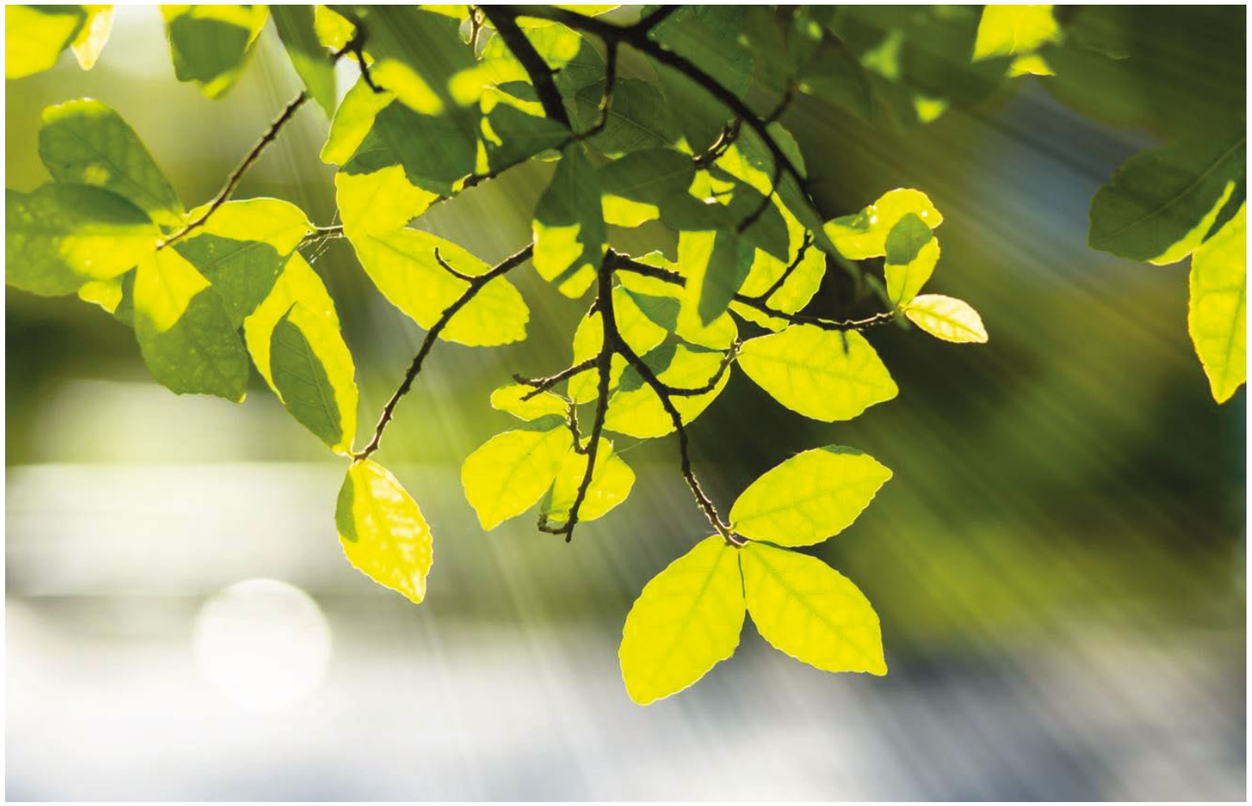
Retrieved ghost nets being processed in V Cycle's factory for further transformation

Lining up collectors and recyclers to upcycle ghost nets

Partners V Cycle (social enterprise); Ghost Net Volunteering Action Team (a local group experienced in ghost fishing gear retrieval)

Ghost fishing nets in Hong Kong's waters are primarily nylon – durable but difficult to recycle. Limited resources and land constraints keep recycling initiatives small-scale. V Cycle plans to invest in storage facilities and processing machineries and collaborates with the Ghost Net Volunteer Action Team to transform recovered nets into useful raw materials or even practical diving equipment.

These innovative solutions showcase the power of combining technology and conservation. Our shared hope is that through continued innovation and collaboration, we can turn the tide on marine debris and preserve our oceans for future generations.



NURTURING TOMORROW'S CONSERVATION LEADERS: WWF'S ONE PLANET SCHOOLS IN ACTION

In 1984, WWF-Hong Kong began pioneering environmental education in the city, turning nature into an immersive classroom. Today, our flagship "One Planet Schools" (OPS) programme, held at our education centres across Hong Kong, creates hands-on experiences that nurture future conservation leaders, delivering curriculum-aligned programmes that bring environmental learning to life.

Our ongoing collaboration with Li Po Chun United World College of Hong Kong (UWC) is a demonstration of this commitment in action. Their annual sustainability project week, called "Conservation in Action and Technology", combines practical conservation activities with education about local ecosystems, giving students an active role in environmental protection while gaining hands-on experience. We spoke to a UWC representative to hear about this year's programme...

Janice Chin

Teacher of IBDP Environmental Systems and Societies at UWC

Q1 What inspired your school to participate in WWF's environmental education programme?

Our participation stems from UWC's core mission – "peace and sustainability". Our "Conservation in Action" programme focuses on environmental justice and sustainable resource use, and our students gained hands-on experience at critical sites like Hoi Ha Wan Marine Park and Mai Po Nature Reserve. This collaboration enhances classroom learning and empowers students to become active participants in conservation, preparing them for future environmental stewardship leadership roles.

Future conservation stewards in action: UWC students gaining hands-on experience with conservation fieldwork as they remove apple snails in Mai Po Nature Reserve

Q2 What were the main educational objectives and student learning outcomes you hoped to achieve?

The main objectives of the project were to raise students' environmental awareness, equip them with practical conservation skills and increase their understanding of threats to local coastal and wetland ecosystems. The key learning outcomes were raising awareness through hands-on fieldwork at Mai Po and Hoi Ha Wan; developing scientific inquiry skills through ecological surveys and data collection – including water quality tests, coral observation and monitoring endangered species; and fostering teamwork through activities like a coastal clean-up at Island House and invasive Apple snail removal at Mai Po. The programme succeeded at transforming environmental concepts into real-world action, empowering students to become proactive environmental citizens while developing their leadership skills and their commitment to sustainability.

Q3 How has the programme impacted your students' environmental awareness and engagement? Did you observe any meaningful changes in their attitudes or behaviours?

From what I saw, the programme's immersive experiences significantly deepened students' environmental awareness. Hands-on activities like coastal clean-ups, ecological surveys and habitat restoration helped them develop practical scientific skills. Direct exposure to environmental challenges made these issues more tangible and urgent for them, especially when they saw the contrast between protected areas and polluted sites.

We also observed remarkable changes in students' attitudes and behaviours. Many moved from passive awareness to active engagement, feeling inspired by their ability to make visible differences. They developed deeper emotional connections with nature and now have greater empathy towards wildlife. Most importantly, the students became more mindful of their environmental impact, with many actively staying involved in conservation activities.

Students learning about Hoi Ha Wan's wonderful marine biodiversity

The programme's multi-pronged approach combines training workshops with on-site field work, equipping students with theoretical knowledge and practical conservation skills

Q4 Looking ahead, how do you envision integrating environmental education into your school's curriculum? Are there specific areas or topics you'd like to explore in future collaborations?

Environmental education is already deeply integrated into our curriculum through the IB Environmental Systems and Societies course. Looking ahead, we're excited to expand our focus on sustainable development and urban planning across disciplines. We're particularly interested in exploring how Hong Kong balances urban growth with habitat conservation, using real-world examples like wetland conservation. Our students will examine case studies involving proposed wetland conservation parks, including Hoo Hok Wai, Sam Po Shue and Nam Sang Wai – these will offer excellent opportunities for field studies and policy analyses.

As for future collaborations with WWF, we're excited about developing programmes on sustainable urban planning for conservation and projects that explore the San Tin Technopole development. Through workshops, field visits and hands-on projects, students will investigate urban development projects while proposing solutions that balance human needs and environmental protection. Our ultimate goal is to nurture informed, critical thinkers who can effectively advocate for sustainable development in their communities.

VISIT OUR CENTRES

WWF-Hong Kong would love you to visit our centres in Mai Po, Hoi Ha Wan, Island House in Tai Po, and Central to take part in guided eco-visits, fun-filled workshops, days out to get a dose of nature, or simply purchase an eco-friendly product from our Panda Shop. We organise all kinds of activities for individuals, families and friends, groups, and schools. Scan the QR codes below to get the latest details and opening hours of our centres.

Mai Po Nature Reserve

Island House Conservation Studies Centre

Hoi Ha Marine Life Centre

Central Sustainability Living Hub

GET INVOLVED!

WWF-Hong Kong hosts a wide variety of activities open to everyone. You can also support us through our many conservation initiatives.

Discover the wonders of Hoi Ha Wan Marine Park through our **Hoi Ha Marine Life Centre's Education Programmes**, designed for community groups of all ages! With four unique themes – **Oceanographer, Coral Exploration, The Story of Fish**, and **Coastal Ecologist** – each programme offers hands-on marine conservation experiences. Explore Hong Kong's underwater world with a glass-bottomed boat ride, observe coral communities and learn how to measure environmental factors that impact marine life. Whether you're part of a school, community group or family, our programmes bring you closer to Hong Kong's rich marine ecosystems.

- **Oceanographer:** Measure physical parameters and learn about the marine environment
- **Coral Exploration:** Observe coral nurseries and marine biodiversity
- **The Story of Fish:** Learn about fish species and their many challenges through role-play activities
- **Coastal Ecologist:** Study coastal habitats and marine animals

The programmes last 3 to 3.5 hours and are available year round. Enjoy 15% off when you book two months in advance!

BOOK NOW

Experience the magic of Mai Po from dusk till dawn in our Night Safari (overnight experience) programme! In this unique 2 Days & 1 Night seasonal adventure, you'll explore the rich biodiversity of the Reserve after dark, perhaps encountering the Mai Po bent-winged firefly and other wildlife at night. And our eco-guides will lead you in appreciating the wonderful biodiversity of Mai Po in the next morning. The programme includes a cozy overnight stay at the newly-built Mai Po Visitor Centre.

The Mai Po Day & Night (overnight experience) is available on selected Fridays and Saturdays in **October**

BOOK NOW

If you wish to explore deep into the rich mangroves in Mai Po, do not miss our **Mangrove Boardwalk Adventure**! Apart from visiting different types of wetlands including *gei wai* (traditional shrimp pond), fishpond, and freshwater marshes, our eco-guides also will lead you to explore the biggest mangrove stand in Hong Kong through a floating boardwalk, and you can observe and enjoy the rich biodiversity on mudflats and appreciate the beauty of shorebirds.

Mangrove boardwalk is available in September and October

BOOK NOW

Join us for the **Island House and Coastline Tour + Sea Glass Workshop** and uncover the hidden gems of Hong Kong's coasts and the city's vibrant past. Explore the iconic Island House, a historic landmark with over 115 years of heritage, and gain insights into sustainable living. Then, venture to Tolo Harbour's intertidal habitats, exploring mangroves and rocky shores while learning about the importance of coastal conservation. Lastly, participate in a creative sea glass workshop and upcycle marine litter into art.

The programme lasts about 3 hours and is available year round.

BOOK NOW

WWF-Hong Kong's Panda Shop has a large variety of eco-friendly products for living, wearing, playing, and eating. Panda Shop products are perfect for gifts for others – and yourself!

SHOP ONLINE NOW

PROTECT HONG KONG BIODIVERSITY

Join our newly-launched "I Live Here Too" campaign and explore local species at WWF-Hong Kong's Visitor Centres!

JOIN OUR CORPORATE MEMBERSHIP PROGRAMME

Our Corporate Membership Programme is committed to partnering with companies that drive sustainable business practices. WWF-Hong Kong's corporate members can enjoy seminars and advisory services provided by our sustainability advisors, and access our sustainability programmes and other customised activities.

WWF

Working to sustain the natural world for people and wildlife
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(Incorporated in Hong Kong with limited liability by guarantee 於香港註冊成立的擔保有限公司)