

**Confirmed Minutes of the
34th Nature Conservation Subcommittee Meeting
held on 28 October 2020 at 2:30 p.m.**

Present:

Prof Kenneth LEUNG, JP (Chairman)

Prof Nora TAM, BBS, JP

Ir Dr Cary CHAN, JP

Ms Julia LAU

Dr Michael LAU

Dr SUNG Yik-hei

Ms Becky LAM (Secretary)

Absent with Apologies:

Ir Dr Conrad WONG, BBS, JP

Prof LAU Chi-pang, BBS, JP

Ms Carmen CHAN, BBS, JP

Dr Winnie LAW

Ms Christina TANG

In Attendance:

Environmental Protection Department (EPD)

Mrs Millie NG	Deputy Director of Environmental Protection (2)
Ms Bella MUI	Assistant Director (Nature Conservation)
Ms Thebe NG	Senior Administrative Officer (Nature Conservation)
Dr Rex SHIH	Forestry Officer (Nature Conservation)
Miss Dora CHU	Executive Officer (CBD) 1
Miss Ingrid SUEN	Executive Officer (CBD) 2

Agriculture, Fisheries and Conservation Department (AFCD)

Mr Simon CHAN	Assistant Director (Conservation)
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In Attendance for Item 2:

Agriculture, Fisheries and Conservation Department (AFCD)

Dr TAM Tze-wai	Executive Director (Hong Kong Wetland Park) (Acting)
Mr Nelson SO	Wetland Park Manager (Reserve)

recommendations of the consultancy study commissioned by the Agriculture, Fisheries and Conservation Department (AFCD) on reviewing the habitat management work of the Hong Kong Wetland Park (HKWP).

5. On the invitation of the Chairman, a Member declared that he had conducted a study on turtles in the HKWP. Another Member also declared that he had provided advice for the educational displays and programmes for the HKWP. The Chairman agreed that the two Members could stay on and continue participating in the discussion.

6. By way of a PowerPoint presentation, Mr Nelson So briefed Members on the results and key recommendations from the consultancy study.

Ecological Conditions of HKWP

7. In reply to a Member's suggestion to increase the variety of nectar food plants within the HKWP to attract more butterfly species, Dr Tam Tze-wai said that a higher priority was accorded to wetland-inhabiting butterfly species and a stable trend could be witnessed in terms of the recorded abundance and number of these species within the HKWP in the past ten years. A Butterfly Garden with nectar food plants was established and had successfully attracted different species of butterflies and enriched the biodiversity there. Various educational activities were organised at the site to promote butterfly conservation.

Effectiveness of the Management Measures

8. A Member considered targets should be devised for habitat management plans and measures. He observed that there was a significant decline for the Common Moorhen, however, the number of the Black-faced spoonbill was increased in the HKWP. Dr Tam Tze-wai advised that the habitat management objective of the HKWP was to attract target species at designated zones. For instance, the target species for Freshwater Marsh 1 included the Little Grebe, White-breasted Waterhen and Common Moorhen. Respective management measures were devised and implemented to meet the needs of the targeted species in different zones. Dr Tam agreed to conduct a review on the target species in accordance with their latest conservation status.

9. A Member enquired on the changes to the ratio of habitats since the establishment of the HKWP, and whether targets were devised for the number of species from each taxon to be found within the HKWP. Dr Tam Tze-wai replied in the negative to both questions and advised that the management objective of the HKWP was to manage a good diversity of habitats and maintain good water quality to protect and promote the biodiversity. As regards the maturity level of the ecosystem in HKWP after years of management, Dr Tam said that the number of species in the HKWP had remained stable over the years, which signified a balanced ecosystem at the HKWP. Continuous efforts would be made to maintain the water quality and remove invasive species in order to further refine the balance.

10. While it might be difficult to devise targets when the HKWP was first

established, a Member pointed out that it would be a good opportunity for the HKWP to review the need to devise targets based on the results of the consultancy study. She further suggested reviewing the ecological functions and health status for each type of habitat in addition to assessing the number and abundance of species in future studies.

11. In reply to a Member's question regarding the anticipated difficulties and challenges in the management of the HKWP, Dr Tam Tze-wai considered that it would be a challenge to strike a balance between development and environmental conservation. He advised that while there was a need for education and eco-tourism, efforts were made to minimise human disturbances by restricting visitor access to habitats like reedbeds, which served important role in filtering surface runoffs and thereby maintaining the freshwater quality in the HKWP. The Member considered the HKWP should be prepared to meet other challenges and threats posed by pollution, invasive species, climate change and the limited lifetime of artificial reedbeds.

12. A Member concurred with another Member that invasive species could pose a threat to the ecosystem in the HKWP. He enquired whether the ecological monitoring data obtained in the consultancy study included both invasive and native species and Dr Tam Tze-wai replied in the affirmative. Dr Tam advised that close monitoring had been conducted and proactive measures were taken to remove invasive species such as the Apple Snails.

13. While commending the efforts made on comparing the temporal trends of the species in the HKWP, a Member observed that the trend shown in the regional data under the study was different from that of the Hong Kong Bird Watching Society. He considered that there was a need to ascertain the accuracy of the source data in order to avoid misinforming management decisions and the setting of targets.

14. The Chairman suggested conducting a multivariate data analysis on the biodiversity (i.e., species number, species abundance and biomass) and environmental data, and computing various biodiversity indices based on the collected data to study changes in the species community over time and among habitats, and identify trends and patterns. The adoption of a suitable biodiversity index might serve as a useful benchmark to facilitate comparisons across different types of habitats within the HKWP and with nearby wetland habitats in the vicinity. For education and publicity, he also suggested using the data to highlight the achievements made in species conservation.

Recommendations from the Study

15. Considering that the nutrient content and the fish/shrimp fry might be more related to letting water in and out rather than the different levels of water depths, a Member suggested investigating the dynamic relationship between the water draining cycle and bird species attracted to roost/forage at the 'mudflat'.

16. In reply to the Chairman's enquiry whether regular draining was conducted in the mudflats, Mr Nelson So said that the water depth of mudflats was monitored on a daily basis. Based on experience and tidal information provided by the Hong Kong

Observatory, the HKWP would control and provide varying water levels for different types of waterbirds.

17. In reply to a Member's enquiry on measures to be taken to address the marked decline in the number of the Common Moorhen, Dr Tam Tze-wai advised that the Common Moorhen showed a clear preference to nest in habitats with dense emergent vegetation and such habitats would be provided in greater areas of Freshwater Marsh 1.

18. To enhance public understanding and knowledge, a Member suggested that the management strategies and measures for each type of habitats in HKWP should be consolidated and publicised.

19. A Member suggested that surveys should be conducted to study the relationship between the abundance and species of insects and invertebrates in the reedbeds and the distribution of birds in the Deep Bay Area. He further suggested analysing the feeding and roosting patterns and behaviours of birds to ascertain the ecological importance of the HKWP as a feeding habitat as compared with other wetlands in the area.

20. Apart from wetland conservation, Mr Simon Chan said that the HKWP served as a model to promote eco-tourism and education about environmental protection. Through adaptive management, the habitats in the HKWP had reached a relatively steady/balanced state. He considered that the establishment of a habitat management plan on the latest management objectives would help devise and systematise the management work.

21. The Chairman thanked the presentation team for their detailed presentation and explanations. He summarised the views of Members and concluded that Members were in general appreciative and supportive of the habitat management work in the HKWP.

[Dr Tam Tze-wai and Mr Nelson So of AFCD left the meeting and Mr Cheung Ka-shing and Mr Yip Sin-hang of AFCD joined the meeting at this juncture.]

Item 3 : Management Plan for Monkeys ***(ACE-NC Paper 4/2020)***

22. The Chairman informed that the paper briefed Members on the management measures taken by the AFCD to address monkey nuisances in Hong Kong.

23. There was no declaration of interest by Members.

24. By way of a PowerPoint presentation, Mr Cheung Ka-shing gave an overview of the origin, distribution and characteristics of the local macaque populations and briefed Members on the management actions taken to address the nuisances caused by monkeys.

Education and Publicity

25. A Member was delighted to learn that the local macaque populations were under control, and suggested the Government publish the relevant statistics for public information. He opined that data on illegal feeding activities should be collected, with a view to providing insights into public education and enforcement action.

26. A Member remarked that it would be imperative to enhance education and publicity on the public awareness of the negative impacts of feeding the macaques. For habitual offenders of the feeding ban, the Member suggested making use of technologies such as surveillance cameras to help detect illegal feeding activities and aid the carrying out of enforcement actions.

27. With regard to a Member's suggestion on highlighting the possibility of transmitting diseases carried by macaques by illegal feeding in the publicity programmes, Mr Cheung Ka-shing considered that a prudent approach should be adapted in disseminating information to the public to avoid unnecessary panic. He shared that many complaints relating to wild animals had already been received by the AFCD for fear of contracting diseases such as the Avian Flu. As regards the Member's suggestion on the use of the surveillance cameras, Mr Cheung mentioned that surveillance camera footages were not admissible to court as evidence. Offenders would have to be caught red-handed by patrolling officers in order to be successfully convicted. Upon successful conviction, the penalty imposed on the offender was \$1,500 on average for recent cases.

28. A Member suggested enhancing the awareness and knowledge of judges on the negative impacts of feeding the macaques. Mr Cheung Ka-shing informed that the Kadoorie Farm and Botanic Garden (KFBG) had provided educational programmes on wildlife crimes to the Hong Kong Judiciary Institute and other relevant organisations recently.

29. The Chairman suggested publicising information and statistics on efforts undertaken to manage macaque nuisance through public media to increase public awareness and knowledge on the prevention of wildlife nuisances, especially on the negative impacts of feeding wild animals.

Management of Macaques

30. A Member acknowledged the challenges in handling macaque nuisances given the persistent feeding activities and highly adaptive nature of macaque species. He pointed out that even the population size of macaques was stable within the Kam Shan, Shing Mun and Lion Rock Country Parks, it would be inevitable for young adult males to disperse and possibly enter into nearby residential areas given that macaques lived in social groups composing of only a few adult males and many adult females and their offspring. To minimise the nuisance caused to nearby residents, he considered it important to set targets to manage and control the population size of macaques

especially for periphery troops in the vicinity of country parks.

31. A Member suggested increasing the carrying capacity and food availability of country parks by planting extra fruit trees so that male macaques could remain in the country parks even after they were expelled from their troops. Mr Cheung said that the number of troops within the country parks had remained stable, and it would be inevitable for young male macaques to disperse and stray into nearby residential areas. As such, the contraceptive and trapping programmes had been extended to cover these periphery troops in order to minimise the incidences of macaque nuisances. He said that the number of monkey nuisance reports had sharply decreased since the introduction of various management actions, and AFCD would keep in view of the development of more advanced techniques to reduce macaque nuisance. In reply to the Member's enquiry regarding the decreasing number of macaques treated by endoscopic surgery since 2010, Mr Cheung explained that a significant proportion of the macaque population had already been captured for the endoscopic surgery in the first few years since the launch of the contraception programme, and macaques that were harder to be captured were treated in ensuing years. To sustain the core macaque population, it was aimed to maintain the birth rate of macaques at about 30% subject to the finding of the population viability analysis being conducted by the AFCD.

32. Considering that the contraceptive programme had effectively reduced the birth rate of macaques from 59% to 33%, the Chairman enquired whether the same method could be applied to control the population growth of wild pigs. Mr Cheung Ka-shing explained that compared with macaques which congregated mainly in three specific country parks, wild pigs were very scattered throughout the territory. The Capture and Contraception/Relocation Programme (CCRP) for wild pigs had focused on capturing and performing contraceptive treatment on wild pigs accustomed to foraging at built-up areas and nuisance sites, on the rationale that their offspring would also likely scavenge for food in these areas. As for macaques, the contraceptive programme aimed at controlling the population growth of the core troops in those three country parks, and in turn reducing the number of periphery troops and the associated nuisance caused.

33. The Chairman considered that with the enhanced publicity efforts against feeding wild animals and the introduction of wildlife-resistant bins, periphery troops would eventually return to the country parks to reunite with the core troops.

Conclusion

34. With no further questions from Members, the Chairman thanked the AFCD representatives for their presentation and detailed clarifications.

[Mr Cheung Ka-shing and Mr Yip Sin-hang of AFCD left the meeting, and Mr Patchill Kwong and Ms Esther Hui of EPD, as well as Ms Louise Li and Dr Ivan Chan of AFCD joined the meeting at this juncture.]

Item 4 : Any Other Business

Progress of the Proposed South Lantau Marine Park

35. The Chairman declared that he was the Chairman of the Marine Parks Committee of the Country and Marine Parks Board. There was no other declaration of interest by Members.

36. On the invitation of the Chairman, Ms Louise Li briefed Members on the background of the proposed Soko Islands Marine Park and the proposed marine park for the Integrated Waste Management Facilities Phase 1 (IWMF) which would be combined to form the proposed South Lantau Marine Park (SLMP). She advised Members on the preliminary boundary and planned management measures of the proposed SLMP. She also shared feedbacks collected from stakeholder consultations and reported on the latest progress of the statutory designation procedures which were targeted for completion by 2022.

37. Mr Patchill Kwong advised that the EPD, as the project proponent of the proposed IWMF, would be responsible for the deployment of artificial reefs (ARs) and release of fish fry at the core area (where fishing activities would be prohibited) of the proposed SLMP. A consultant would be engaged by the EPD starting from the first quarter of 2021 tentatively to devise a detailed design of the ARs, and then to supervise the construction and deployment works of the ARs, release of fish fry, as well as monitor and evaluate the effectiveness of these fisheries enhancement measures.

38. There being no comments or questions from Members, the Chairman thanked the representatives of AFCD and EPD for their detailed presentation. He welcomed the designation of the proposed SLMP which would enhance the protection of Finless Porpoises and Chinese White Dolphins, as well as fisheries resources.

[Mr Patchill Kwong and Ms Esther Hui, Ms Louise Li and Dr Ivan Chan left the meeting, and Mr Cheung Ka-shing and Ms Eva Yau of AFCD joined the meeting at this juncture.]

Wildlife Collection in the Countryside

39. The Chairman informed that two Members proposed to discuss the issue on how to control wildlife collection in the countryside and had provided an information note to Members on 22 October 2020 to facilitate the discussion.

40. On the invitation of the Chairman, a Member briefed the meeting on the existing legislation and highlighted that certain hunting/capturing activities of species outside Schedule 2 of the Wild Animals Protection Ordinance (WAPO), Cap. 170 were not regarded as an illegal act under the existing regime. He observed that there was exchange of information through social media on the capturing of wild-caught animals such as the Tokay Gecko from country parks for sale, and suspicious activities spotted in the Tai Mo Shan Country Park that might had led to a population decline in the Giant Spiny Frog which was listed as ‘Vulnerable’ in the IUCN Red List of Threatened

Species. He considered that there was an urgency to rectify the legislative regime in order to prevent adverse impacts on the biodiversity.

41. Mr Cheung Ka-shing advised that the WAPO prohibited the hunting of any wild animals by means of any hunting/trapping appliances, and its Schedule 2 had listed out 24 types of wild animals to be protected. He further mentioned that both the Tokay Gecko and Giant Spiny Frog were not covered in Schedule 2 of WAPO. As one of the actions under the Hong Kong Biodiversity Strategy and Action Plan (BSAP), he advised that assessments were being carried out to identify the conservation status of threatened species in Hong Kong, including amphibians and reptiles, for better protection of these species.

42. In reply to the Chairman's enquiry on the procedure for amendment of Schedule 2 under WAPO, Mr Cheung Ka-shing advised that the amendment of Schedule 2, which was a subsidiary legislation, would involve Gazette publication followed by negative vetting by the Legislative Council.

43. A Member expressed appreciation towards the efforts undertaken to review the need to amend current legislation to enhance the protection of threatened species. He mentioned that Schedule 2 of WAPO was last updated in 1996 and had a low coverage of insects and amphibians. He said that many species common to Hong Kong and southern China, especially those that were edible and of commercial value, had experienced a plummeting population in southern China. It would, therefore, be important to preserve a healthy population of the concerned species in Hong Kong. He opined with the agreement of the Chairman and another Member that it was desirable to amend Schedule 2 to protect these species from large-scale hunting/trapping.

44. Mr Simon Chan advised that in consultation with experts and stakeholders, the Hong Kong List of Threatened Species was being compiled in phases, with priority accorded with regard to the current conservation concerns, commercial value and availability of information etc. The first batch of assessment results would be published in 2021 to cover taxonomic groups with relatively fewer numbers of species and more likely be subject to exploitation, including amphibians and reptiles. Based on the assessment results, consideration would be made to include species that faced hunting threats in Schedule 2 of the WAPO. The Chairman requested and Mr Simon Chan agreed to report to NCSC when the first batch of assessment results was made available.

AFCD

45. In reply to a Member's question regarding the protection of fishes and marine invertebrates which were not covered under the WAPO, Mr Cheung Ka-shing said that the Fisheries Protection Ordinance (FPO) (Cap. 171) provided for the protection of fisheries resources and regulation of fishing practices. However, the FPO did not provide for the protection of commercial species that could be legally captured. He mentioned that the amendment of existing legislation or the introduction of new legislation would take time. Meanwhile, measures to enhance the protection of fishes and marine invertebrates of conservation interest would be explored.

46. Mr Simon Chan supplemented that the WAPO, FPO and the Country Parks

Ordinance (CPO) served different purposes. The objective of WAPO was to protect wild animals from hunting threats. Under the WAPO, the use of hunting/trapping appliances was banned to prevent devastating losses in a particular species. For the protection of fish and other forms of aquatic life, such as marine invertebrates, the FPO banned the use of various fishing methods and equipment that were detrimental to the marine ecosystem and resources. The CPO banned the use of hunting appliances to hunt/trap any form of wild life, including fish, within a country park or special area. Besides, there was a set of countryside code of conduct for visitors. While the capturing of wild animals without appliances was not anticipated to cause a significant impact, Mr Chan advised that in order to enhance the protection of threatened species, the Government would review the need to amend the current legislation. He mentioned that for species with commercial value, there might be a need to step up enforcement under WAPO and devise species action plans as necessary. As an example, he mentioned that under the species action plan for the Golden Coin Turtle, AFCD had been working with the KFBG to preserve the remnant populations and a conservation breeding programme had been introduced.

47. A Member was concerned about the legislative loophole that allowed the hunting/capturing of animals without the use of appliances, which might lead to severe damages to the biodiversity as more and more people became aware of it. She considered that it was vital to rectify the situation as soon as possible.

48. Addressing a Member's concerns on the enforcement difficulties, Mr Cheung Ka-shing advised that targeted research had been conducted in collaboration with experts. For example, the effectiveness of the use of surveillance cameras to detect illegal trapping of freshwater turtles was being explored to facilitate enforcement actions. Mr Simon Chan acknowledged the enforcement difficulties considering the extensive management area and limited manpower resources, and advised that AFCD had been keeping in view of the latest technologies and techniques to strengthen the enforcement efforts. He mentioned that Infrared Sensor Camera Traps were installed at various strategic locations to detect illegal felling of Incense Trees. AFCD would carry out joint enforcement operations with the Hong Kong Police Force when needed. While regular patrols were conducted within country parks, Ms Eva Yau supplemented that wildlife crime was often committed in remote sites and during the night/at dawn. To enable better planning of enforcement operations, AFCD had installed surveillance cameras at black-spots to collect intelligence where needed. She shared that with enhanced public awareness on environmental protection and conservation by education and publicity efforts, more and more reports from the public against wildlife crime and associated suspicious activities had been received by AFCD which facilitated their enforcement actions.

49. There was no other business for discussion at the meeting.

Item 6 : Date of next meeting

50. The Chairman said that Members would be advised on the date of the next meeting and the agenda in due course.

**Nature Conservation Subcommittee Secretariat
December 2020**