



**In Attendance for Item 3:**

*AFCD*

Dr Flora MOK

Senior Conservation Officer (Biodiversity)

Dr Terence NG

Conservation Officer (Biodiversity)1

**In Attendance for Item 4:**

*Hong Kong Bird Watching Society (HKBWS)*

Mr YU Yat-tung

Director

Action

The Chairman welcomed Members for attending the meeting in person or by Zoom. He informed the meeting that apologies of absence had been received from Ms Carmen Chan, Prof Lau Chi-pang and Dr Wong Kwok-yan.

**Item 1 : Matters arising**

2. The Chairman advised Members that the minutes of the last meeting held on 15 June 2021 were confirmed by circulation on 20 August 2021 with the amendments proposed by a Member incorporated.
3. There were no matters arising from the minutes of the last meeting.

**Item 2 : New Measures for the Management of Wild Pigs**  
***(ACE-NC Paper 1/2022)***

*(Mr Cheung Ka-shing of AFCD joined the meeting at this juncture.)*

4. The Chairman indicated that the paper briefed Members on the new measures introduced by the Government in November 2021 for the management of wild pigs and sought their views on the matter.
5. There was no declaration of interest by Members.
6. Mr Simon Chan gave an overview of the subject and Mr Cheung Ka-shing briefed Members, by way of a PowerPoint presentation, on the existing situation of wild pig nuisances, new wild pig management measures, proposed legislative amendment and other measures to tackle the issue.

*Wild Pig Nuisances and Injury Cases*

7. In response to a Member's question on the population of wild pigs in the urban area, Mr Cheung Ka-shing responded that it would be difficult to estimate the total

number of wild pigs lingering in the urban fringe because of their mobility and their number would also be affected by the ongoing humane dispatch operations. He explained that the number of complaints and injury cases would be a more appropriate benchmark for evaluating the effectiveness of the new management measures.

8. The Chairman recalled that there were about 2,500 wild pigs in Hong Kong and enquired whether the number of nuisance cases reported were proportionate to the number. Mr Cheung Ka-shing clarified that the quoted figure was in fact the number of wild pigs recorded by infrared cameras set inside the country parks, and those ones lingering in the urban fringe were not included. Mr Cheung was of the view that there was no correlation between the number of the wild pig nuisance cases and the total number of wild pigs in the country parks as they were not the source of the nuisances.

9. Noting that the number of injury cases was on the low side during 2013 to 2020, a Member questioned why there was a sudden surge in 2021. Mr Cheung Ka-shing shared that a change in behaviour was observed from the wild pigs. Getting accustomed to being fed, the wild pigs lost their innate fear of human and become more proactive and aggressive in seeking food from them.

10. The Chairman pointed out that the number of injury cases caused by wild pigs was still on the rise in 2022 after the adoption of the new wild pig management measures. Mr Cheung Ka-shing responded that the majority of the injury cases in 2022 was caused by a group of wild pigs at Mount Parker Road which had developed aggressive behaviours in seeking food from human. He highlighted that there had been no new injury cases at this black spot since April 2022 after the wild pigs concerned were captured and humanely dispatched.

#### *The Capture and Contraception / Relocation Programme (CCRP)*

11. With reference to Table 4 of Annex I to ACE-NC Paper 1/2022, two Members sought further details on the number of wild pigs returning to the urban areas after their relocation. They also asked why some wild pigs captured under CCRP were not sterilised. Mr Cheung Ka-shing explained that only female wild pigs of appropriate age range and health conditions could receive contraceptive vaccine whereas the feasibility of sterilisation surgeries would be subject to site conditions such as the space available or terrain involved. As such, some wild pigs captured under CCRP might not be sterilised. In response to one of the two Members's follow-up question, Mr Simon Chan confirmed that CCRP had ceased operation and was replaced by the new capture and humane dispatch operations.

*Capture and Humane Dispatch Operations*

12. Highlighting that the root cause of wild pig nuisances was the inappropriate human feeding activities, two Members opined that priority should be accorded to curbing the illegal feeding activities instead of killing the wild pigs. In response to their enquiry on the targeted number of reduction in injury cases for the humane dispatch operations to cease, Mr Simon Chan said that the operation would cease when the wild pig nuisances were under control. Sharing a sad case involving the amputation of an arm of a person due to an infection caused by a wild pig attack, another Member expressed support to the new wild pig management measures. She was of the view that priority should be accorded to avoid similar injuries to human.

13. Highlighting that wild pigs were native species in the country parks, a Member enquired whether the humane dispatch operation would affect the ecosystem and biodiversity. Mr Cheung Ka-shing considered that such operation should not pose adverse impact on the ecosystem. Unlike those wild pigs in the country parks, the ones lingering in the urban areas had lost their role in the ecosystem as they would no longer solely forage in the nature.

14. In response to a Member's question, Mr Cheung Ka-shing explained that the cases marked with "0" in the last column of Table 3 at Annex I to ACE-NC Paper 1/2022 referred to those operations with no wild pigs captured or humanely dispatched.

*Legislative Amendment and Enforcement Actions*

15. The Chairman enquired about the timeline for the proposed legislative amendment on the expansion of Feeding Ban Area as well as the increase in penalty for illegal feeding. Mr Cheung Ka-shing explained that the increase in penalty for illegal feeding would require the amendment of the Wild Animals Protection Ordinance (Cap. 170) (WAPO) which was targeted for completion in 2023. As for the expansion of the Feeding Ban Area, Mr Cheung said that the procedure for the amendment of a subsidiary legislation was expected for completion by the end of 2022.

16. While Members were supportive of the proposed legislative amendment, four Members expressed concern on the enforcement part for prohibiting and discouraging people to illegally feed wild pigs. Acknowledging the difficulty in enforcement, Mr Cheung Ka-shing said that it was necessary to raise the penalty level and introduce fixed penalty to increase the deterrent effect, and assistance would be sought from the Police when necessary.

17. Two Members enquired about the number of operations conducted to prosecute illegal feeding activities, in particular for wild pigs. One of the two Members suggested AFCDC to step up prosecution efforts against illegal feeding with a view to increasing the deterrent effect. Mr Simon Chan explained that the figures on prosecutions against illegal feeding of wild animals provided in Table 5 of Annex I to ACE-NC Paper 1/2022 covered both wild monkeys and wild pigs. He pointed out that it would be difficult to isolate the figures for wild pigs as they were often found together with wild monkeys in the Feeding Ban Area. Mr Chan further explained that information on cases of illegal feeding outside the Feeding Ban Area was unavailable as such activities were currently regarded as littering and the prosecution responsibility was under the purview of the Food and Environmental Hygiene Department (FEHD).

18. With reference to a Member's enquiry on why the number of successful prosecutions (i.e. 28) provided at Table 5 of Annex I to ACE-NC Paper 1/2022 was higher than the number of prosecutions (i.e. 26) in 2019-20, Mr Cheung Ka-shing explained that some of the prosecutions instituted in the latter part of 2018-19 had been processed and included in the figures of 2019-20.

19. A Member sought details about the enforcement responsibility and the manpower designated for the purpose. The Chairman further asked whether AFCDC would seek more financial and human resources from the Legislative Council for this purpose. Mr Cheung Ka-shing responded that AFCDC would cope with the additional enforcement workload through internal redeployment and assistance from other enforcement departments would be sought when needed. Mr Simon Chan supplemented that a risk-based enforcement strategy would be adopted by focusing the resources at the feeding black spots. He said that AFCDC would review the effectiveness of the enforcement work and seek more resources if necessary.

20. Pointing out that the average fine per case in the last two years was less than \$1,000 despite the maximum penalty was \$10,000, a Member doubted whether raising the maximum penalty to \$100,000 would have significant impact if the penalty imposed by the court was on the low side. Mr Simon Chan was of the view that the increase in penalty, particularly with the immediate issue of fixed penalty tickets to offenders, would serve to incur deterrent effect. To deter the public from feeding wild animals, AFCDC would prosecute offenders of serious cases by issuing summons with a view to inducing a higher penalty by the Court.

*Publicity and Education*

21. A Member expected that AFCD might encounter strong resistance from the offenders once the penalty level was raised. She enquired if there was any plan to solicit public support to the new management measures. Mr Simon Chan remarked that in addition to the increased penalty, AFCD would strengthen publicity and education with a view to curbing the feeding activities.

22. A Member indicated that AFCD should strengthen public education such as through promotional banners to educate people about the appropriate behaviours when encountering wild pigs and to discourage feeding of animals including stray cats and feral pigeons. Mr Simon Chan agreed with the Member that publicity and education on the proper behaviours when encountering wild pigs were of paramount importance. Mr Chan supplemented that while feeding of stray cats and dogs was not regulated under the existing ordinance, there was a plan to regulate the feeding of feral pigeons in the future.

*New Rubbish Bins and Litter Containers*

23. Noting that new rubbish bins and litter containers with improved design would be adopted in public places under the management of FEHD, the Chairman suggested that the Government should liaise with private property management parties on the adoption of the same type of rubbish bins and litter containers in rural residential areas. Mr Cheung Ka-shing replied that FEHD was currently responsible for collecting the waste of some rural villages where new bins and containers were already adopted. He said that AFCD would liaise with the designer of the new rubbish bins and litter containers on the possibility to open up the products in the private market.

*Conclusion*

24. The Chairman thanked the AFCD representatives for their detailed presentation and concluded that Members were generally in support of the new wild pig management measures.

*(Mr Cheung Ka-shing of AFCD left the meeting. Dr Flora Mok and Dr Terence Ng of AFCD joined the meeting at this juncture.)*

**Item 3 : Developing the Hong Kong Biodiversity Information Hub**  
***(ACE-NC Paper 2/2022)***

25. The Chairman announced that the paper briefed Members on the development of the Hong Kong Biodiversity Information Hub (HKBIH) and sought their views on its design and strategies to promote local biodiversity with this new platform.

26. There was no declaration of interest by Members.

27. Mr Simon Chan briefed Members on the background of the HKBIH. By way of a PowerPoint presentation, Dr Flora Mok and Dr Terence Ng gave an overview on the development and key features of the HKBIH.

*Website Content*

28. A Member enquired whether the HKBIH provided qualitative data on species diversity or quantitative data on the abundance of the species concerned. Dr Terence Ng explained that the Biodiversity Geographic Information System (BGIS) to be built in Phase 2 of the HKBIH development would provide semi-quantitative information of local species. Spatial information of species in terms of their occurrence records rather than their abundances at different locations would be made accessible to the public.

29. Noting that a hyperlink to the conservation status of the species in the International Union for Conservation of Nature's Red List was provided on the profile page of individual species in the HKBIH, a Member suggested that AFCD should also incorporate other relevant information including their current conservation status, threat as well as possible conservation actions in Hong Kong. Dr Flora Mok responded that there were feature articles containing such information for a number of local species of conservation concern in the HKBIH, and such information would be provided for more species when available in the future.

30. A Member was pleased to see the development of the HKBIH which would contribute to the conservation of biodiversity in Hong Kong. The Member suggested that AFCD could consider including biodiversity information from other local databases and websites such as "Ting Kok+", "HK Dragonfly" and "Reptiles of Hong Kong", and add their hyperlinks as well as the distribution map of the future BGIS to the information page of the species in the HKBIH.

31. In response to a Member's enquiry, Dr Flora Mok said that the development of BGIS was anticipated to be completed in 2024. The Member proposed that AFCD could incorporate information regarding the timing of species occurrences to permit visualisation of historical changes in the BGIS. Dr Terence Ng responded that temporal information and an associated filter would be provided in the BGIS but he also remarked that meaningful temporal trends could only be obtained with consistent sampling effort across time. Dr Mok thanked the Member for her suggestion and said that AFCD would incorporate her suggestion in the Phase 2 development of the HKBIH.

32. With reference to the United Nations (UN)' initiative on UN Decade on Ecosystem Restoration and China's Master Plan for National Key Ecosystem Protection and Restoration Major Projects, the Chairman viewed that the HKBIH should also provide information on the progress of ecological restoration in Hong Kong.

33. Pointing out that the programmes produced by the Radio Television Hong Kong (RTHK) would be removed from their website after a short period of time, a Member suggested that AFCD should explore the possibility of permanently hosting RTHK's biodiversity-related programmes on the HKBIH on a long-term basis.

#### *Interactive Design*

34. A Member pointed out that the design of the HKBIH was academic with mainly descriptive and photographic information of species. She considered that AFCD should enhance the interactive design of the HKBIH and add some fun elements with a view to arousing the interest of the general public. The Chairman echoed the Member's views and suggested that AFCD could utilise 360-degree virtual reality technology to enrich the database. The Member reminded that the interface of the HKBIH should be user-friendly to facilitate easy navigation.

35. Drawing reference to a mobile application developed a few years ago for the identification of floral species, a Member held the view that the Government should consider providing a similar function for the HKBIH. The Chairman shared that substantial effort would be required to train an artificial intelligence (AI) system to identify species. As an example, he said that around 200 to 400 photos were required to train the AI system to identify one single species of fish. Dr Flora Mok supplemented that it would be even more complex when it came to those species with appearances changing dramatically across life stages and/or between sexes. The Member said that AFCD should explore the possibility of a collaboration with the aforesaid mobile application or draw references from them in developing the species identification function. Dr Mok thanked the Member for her suggestion and said that AFCD would



keep in view of the development of innovative technology and explore potential applications relevant to the HKBIH as appropriate.

*Publicity*

36. Pointing out that there had been a lack of public awareness of the HKBIH since its launch in March 2022, a Member opined that AFCD should strengthen the publicity efforts to encourage public usage. The Chairman proposed that feature articles on ecology and biodiversity in local newspapers with reference to the HKBIH could be published to promote the website.

*Synergy with Other Environment-related Databases*

37. To facilitate the sharing of data among different biodiversity-related databases/GISs in Hong Kong, the Chairman suggested a compulsory data deposition into a government's centralised biodiversity and ecology database (e.g. BGIS) should be implemented for all relevant research funding schemes of the HKSAR Government such as the Lantau Conservation Fund and Environment and Conservation Fund that project proponents of biodiversity-related projects would be required to input their biodiversity data and corresponding sampling locations (in terms of GPS) into the database following a standardised spreadsheet or through a designated online platform. The data input would then be automatically accessible and visualised via a geographical information system within the database.

38. A Member enquired whether the BGIS to be developed in Phase 2 of the HKBIH development was the same as the Centralised Environmental Database (CED) to be developed by EPD. Dr Flora Mok clarified that, to her understanding, they were two separate platforms to be built for different purposes. She elaborated that the BGIS would feature biodiversity information from multiple data sources for educational purposes and for facilitating mainstreaming of biodiversity conservation, whereas the CED would cover biodiversity and other environmental data such as air, noise and water quality data extracted from past environmental impact assessment (EIA) projects for the purpose of facilitating the EIA process. The Chairman further enquired and Mr Simon Chan confirmed that suitable data from the BGIS/HKBIH would be appropriately shared with the CED in the future.

*Conclusion*

39. The Chairman thanked AFCD for their presentation and concluded that Members were supportive and appreciative of the development of the HKBIH. Mr Simon Chan thanked Members for their valuable comments and welcomed further

suggestions which would be taken into consideration for the continuous enrichment of the HKBIH.

*(Dr Flora Mok and Dr Terence Ng of AFCD left the meeting. Mr Yu Yat-tung of the HKBWS joined the meeting at this juncture.)*

**Item 4 : Any Other Business**

(i) *Presentation by Hong Kong Bird Watching Society on the findings of the study “Ecological correlates of 20-year population trends of wintering waterbirds in Deep Bay, South China”*

40. The Chairman informed the meeting that the HKBWS had been invited to present their findings of the above-mentioned study. The relevant report and presentation slides provided by the HKBWS were circulated to Members before the meeting.

41. Upon the invitation of the Chairman, Mr Yu Yat-tung briefed Members of the key findings of the study highlighting the increasing and declining species in the Deep Bay Wetlands, habitat changes in Deep Bay, and factors associated with changes as well as the conservation implications.

42. The Chairman enquired about the reasons behind the drastic drop in the mid-winter peak count of waterbirds from around 90,000 to 48,000 since 2007. Mr Yu Yat-tung explained that as the study was a correlational study of the statistics of waterbirds, it might not provide a clear answer to the question. He shared that common factors such as water quality as well as food availability would affect the number of waterbirds in the habitats. The Chairman pointed out that the sedimentation of intertidal mudflats, growth of mangroves in Mai Po as well as the lack of maintenance for aquaculture ponds due to the aging fish farmer population might affect the quality and diversity of habitats for the waterbirds. Mr Yu agreed with the Chairman's comments. He furthered that the development of the Northern Metropolis might also disincentivise investment and efforts in maintaining the aquaculture ponds by the fish farmers.

43. Mr Yu Yat-tung hoped that there would be further collaboration with tertiary institutions and other organisations in investigating the factors contributing to the changes in waterbird species as well as the drop in the count of waterbirds in Deep Bay. The Chairman concluded the discussion and thanked Mr Yu for his fruitful sharing of the findings of the study.

(ii) *Discussion on “Wildlife collection and other illegal activities in countryside”*

44. The Chairman informed Members that a Member and a former ACE Member proposed to discuss wildlife collection and other illegal activities in the countryside. Background information prepared by them on this subject had been circulated to Members before the meeting to facilitate the discussion. On the invitation of the Chairman, the Member briefed the meeting on the observations of wildlife collection and other illegal activities in the countryside.

45. A Member urged AFCD to provide timely responses to the intelligence collected from surveillance cameras and reinforce patrols in country parks outside office hours with the Police’s support. Mr Simon Chan remarked that AFCD had been looking into the matter and sting operations were already conducted based on the intelligence received. He pointed out the difficulty to arrest the offenders since the illegal selling of wildlife was done discreetly on social media, but with the assistance of the Police two offenders were arrested in a sting operation a few months ago. He indicated that AFCD would continue to step up enforcement actions.

46. Pointing out that AFCD’s original target was to draw up the list of threatened species (i.e., local red list species) for priority groups by 2021, a Member enquired about the progress and timeline for completion as there were existing loopholes in the WAPO which allowed hunting of unprotected species without the use of hunting appliances. Mr Simon Chan assured Members that the list would be drawn up as soon as practicable. As substantial amount of data was involved in species analysis and assessment for drawing up the list, Mr Chan expected that the first batch of assessment result would be available by the end of 2022. With a view to providing timely protection to the threatened species, the Chairman hoped that AFCD would promptly include the commonly known endangered or vulnerable species into the list without waiting for the assessment result.

47. In response to the Chairman’s enquiry about the existing penalty for wildlife collection, Mr Simon Chan advised the meeting that any person who hunted any wild animals with hunting appliances were liable on conviction to a fine of \$50,000 whereas any person who sold or had in possession the protected wild animal listed in Schedule 2 of the WAPO were liable on conviction to a fine of \$100,000 and imprisonment of one year. A Member opined that the penalty should be increased to enhance the deterrent effect. Another Member added that more resources should be devoted to strengthen the enforcement actions.

48. A Member hoped that the Government would take prompt action to reinforce the patrol and enforcement actions against illegal activities in the countryside.

Considering that there might not be sufficient resources to enhance the patrol arrangement, the Chairman indicated that AFCD could collaborate with the Police to occasionally conduct special enforcement operations with a view to imposing a deterrent effect. Agreeing with the Chairman, Mr Simon Chan indicated that AFCD would continue to conduct joint operations with the Police on curbing wildlife collection and illegal activities in the countryside.

**Item 5 : Date of next meeting**

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

50. There being no other business, the meeting was adjourned at 6:05 p.m.

**Nature Conservation Subcommittee Secretariat  
December 2022**