

Confirmed Minutes of the 30th Nature Conservation Subcommittee Meeting
held on 18 December 2018 at 10:00 a.m.
in Conference Room, 33/F, Revenue Tower, Wan Chai, Hong Kong

Present:

Dr Michael LAU (Chairman)
Prof Nora TAM, BBS, JP
Ir Cary CHAN, JP
Dr Billy HAU
Prof LAU Chi-pang, JP
Prof Kenneth LEUNG, JP
Mr Anthony LOCK
Prof John NG
Dr Eric TSANG
Ir Conrad WONG, BBS, JP
Ms Becky LAM (Secretary)

Absent with Apologies:

Dr HUNG Wing-tat, MH
Ms Julia LAU
Ir Michelle TANG
Prof Jonathan WONG, MH, JP

In Attendance:

Environmental Protection Department

Mrs Vicki KWOK	Deputy Director of Environmental Protection (2)
Ms Daisy LO	Assistant Director (Nature Conservation)
Ms Thebe NG	Senior Administrative Officer (Nature Conservation)
Mr Eric LIU	Forestry Officer (Nature Conservation)
Miss Carman LEUNG	Executive Officer (CBD) 2

Agriculture, Fisheries and Conservation Department

Mr Simon CHAN	Assistant Director (Conservation)
Mr CHEUNG Ka-shing	Senior Wetland and Fauna Conservation Officer

The Chairman welcomed Members to the meeting and informed that apologies of absence had been received from Dr Hung Wing-tat, Ms Julia Lau, Ir Michelle Tang and Prof Jonathan Wong.

Item 1 : Confirmation of the draft minutes of the 29th meeting held on 19 October 2018

2. The draft minutes of the last meeting were confirmed without amendments.

Item 2 : Matters Arising

3. There was no matter arising from the minutes of the last meeting.

Item 3 : Enhanced Management of Wild Pigs
(ACE-NC Paper 6/2018)

4. The Chairman said that as many Members were not able to take part in the discussion on the proposed management plan to address the wild pig nuisance under Any Other Business at the last meeting, the Agriculture, Fisheries and Conservation Department (AFCD) had prepared a formal discussion paper to gauge the views of the Nature Conservation Subcommittee (NCSC) on the proposed management measures, prior to the consultation with the Panel on Environmental Affairs (EA Panel) of the Legislative Council (LegCo).

2. There was no declaration of interests by Members.

3. As invited by the Chairman, Mr Simon Chan gave an overview of the issues, and by way of a powerpoint presentation, Mr Cheung Ka-shing reported on the trend and distribution of wild pig reports, recent cases of injuries, past management measures, and briefed Members on the Management Action Plan for Wild Pigs (the Plan) which consisted of the following actions:

- (i) To manage wild pig nuisance;
- (ii) To monitor distribution, population density and movement;
- (iii) To establish dedicated response teams for more efficient actions;
- (iv) To reduce food attraction at public area;
- (v) To roll out the Wildlife Smart Programme; and
- (vi) To review and strengthen the management strategies.

Monitoring and managing of wild pigs

4. In response to a Member's enquiry regarding the reasons for suspending wild pig hunting and the respective financial and manpower resources required for hunting and the Capture and Contraception/Relocation Programme (CCRP), Mr Cheung Ka-shing advised that while hunting was a

worldwide practice for wild pig management, there were various constraints in Hong Kong that prevented hunting from being an effective measure for controlling the local wild pig population. For instance, given the safety concerns associated with using firearms in densely populated urban areas, hunting operations had to be authorised by the Hong Kong Police Force and were mainly carried out in golf courses and farmlands. Mr Cheung further advised that civilian hunting teams were formed by volunteers and all the equipment and operations were self-financed. It did not incur any expenditure to the Government for maintaining the hunting teams or conducting hunting operations. As regards the manpower resources, a team of more than ten people were generally required to execute either hunting or CCRP operations. The preparatory work for CCRP however required more time and resources to ensure the effectiveness of the operation.

5. Mr Simon Chan pointed out that wild pig nuisance was prominent in urban areas including the Hong Kong Island, and it was extremely difficult to execute hunting operations in these areas. Furthermore, with only about 40 to 50 wild pigs caught per year prior to the suspension of hunting operations in 2017, hunting was considered to be an ineffective measure. In this connection, CCRP was introduced which involved capturing wild pigs at nuisance sites, vaccinating them with an immuno-contraceptive vaccine and releasing them to the remote countryside. Mr Cheung Ka-shing advised that less than one wild pig was captured per hunting operation on average, as compared to around three wild pigs captured under CCRP. He advised that the number of captures per operation was constrained by the need to conduct detailed examination on the captured animals as part of the research studies on the effectiveness of the immuno-contraceptive vaccine on wild pigs.

6. Addressing the concern of Members about the exponential growth of the wild pig population, Mr Simon Chan explained that the natural mortality of wild pigs and piglets and predation by pythons and feral dogs helped control the wild pig population. While the wild pig population had only seen a slight increase, the availability of food in urban areas and near human settlements had led to a significant increase in wild pig sightings and nuisances.

7. Citing a study conducted by the University of California on wild pigs, a Member advised that wild pigs were susceptible to at least 30 zoonotic diseases, of which 20 could be transmittable to humans. Wild pigs were also known to cause extensive damage to crops and rangelands. From a public health and safety point of view, he considered that educational efforts and measures to control wild pig population growth should be strengthened, and he supported euthanising high-risk individuals. He suggested that the Government should maintain close communication with animal welfare groups such that they could gain a better understanding on the severity of the current situation of proliferating wild pig nuisance. He also suggested removing wild pigs by trapping which was far more effective than hunting in controlling wild pig population growth according to the aforementioned study.

8. Mr Cheung Ka-shing replied that a prudent approach would be taken in educating the public on zoonotic diseases carried by wild pigs to avoid unnecessary panic. He advised that trapping was already in use in Hong Kong and it was an effective wild pig management measure, especially at golf courses, provided that there was adequate manpower to regularly inspect the trapping devices. He added out that this method was also subject to spatial constraints. Nevertheless, trials would be conducted in suitable areas, especially where wild pigs could not be captured under CCRP. He agreed with a Member that the installation of fencing on a small scale with regular maintenance was also an effective option to prevent wild pigs from roaming into roads and keep them out of residential areas.

9. With reference to a complaint which involved repeated rooting of a lawn by wild pigs at a school in Stanley, a Member enquired whether wild pigs stayed in relatively stable dwelling places or habitats.

10. Mr Cheung Ka-shing advised that while wild pigs might become accustomed to foraging at or near human settlements, they roamed about freely over an extensive area. Regarding the aforementioned complaint, he explained that it was caused by the lack of maintenance of fences and the presence of leftover food in refuse bins at the concerned school. Given that capture and relocation had a very limited effect on keeping away wild pigs from private properties, it was important for the property management to take their own precautionary measures such as strengthened boundary fencing and proper management of site hygiene to keep wild pigs from venturing into the properties for food.

11. A Member agreed that a multi-pronged approach should be adopted but opined that more resources should be allocated to measures which had been found to be more effective in managing wild pig nuisance. She expressed support for euthanising high-risk wild pigs to protect public health and safety, and suggested that the Government should publicise information on how to identify high-risk wild pigs and the expected number of wild pigs to be euthanised. In view that wild pig hunting was conducted by voluntary civilian hunting teams and had a certain effect in controlling the wild pig population, the Member considered that it should not be suspended as one of the wild pig management measures. She further opined that measures such as relocation of captured wild pigs to remote countryside areas and the monitoring of wild pigs population in the countryside were ineffective in addressing nuisance caused by wild pigs, thereby should be given less resources.

12. Regarding the euthanasia of wild pigs, Mr Cheung Ka-shing advised that formal documentation detailing the processes and procedures for identifying high-risk individuals to be euthanised would be drawn up to guide the operations. He mentioned that the number of wild pigs foraging in urban areas was stable. Many of the individuals and groups of these wild pigs could be identified and their behaviour was observed to be consistent, with some

being more aggressive than others. He agreed with a Member that the relocation of captured wild pigs was a resource-intensive measure; however it could help alleviate the nuisance with immediate effect. AFCD would monitor and assess the effectiveness of relocation by monitoring the tendency of relocated individuals to return to built-up areas. As regards the monitoring of wild pigs population, Mr Cheung advised that about 100 infrared cameras had already been installed in the country parks for monitoring the population and distribution of wild pigs. He mentioned that infrared cameras were also set up at nuisance black spots, if technically feasible, to monitor the feeding activities for the planning and undertaking of enforcement actions by the Food and Environmental Hygiene Department (FEHD) under the Fixed Penalty (Public Cleanliness and Obstruction) Ordinance (Cap. 570).

Public education

13. Considering that feeding accounted for 44% of the wild pig nuisance reports, a Member opined that the Government should step up the promotional and educational efforts to raise the awareness of no feeding.

14. As compared to the management of wild monkeys, Mr Cheung Ka-shing explained that the management of wild pigs was more challenging owing to their extensive movement range and distribution. As such, territory-wide promotion and education to raise awareness on the negative consequences of feeding wild pigs would be essential. AFCD had launched a Wildlife Smart Programme, under which a series of publicity and education programmes would be organised in schools and other venues, in addition to distributing/ displaying leaflets and posters territory-wide.

15. A Member suggested, with the agreement of Mr Cheung Ka-shing, that clear information and concepts about the zoonotic diseases transmittable through contacts with wild animals could be incorporated in the curriculum of kindergartens, primary and secondary schools such that students could pass relevant information to their family members.

Reduce food attraction

16. Addressing a Member's enquiry regarding the design of refuse collection facilities and whether the limited food resources in country parks was the reason for wild pigs foraging in urban areas, Mr Cheung Ka-shing said that AFCD had in mid-2018 commissioned a consultancy study, in collaboration with FEHD and EPD, to improve the design of refuse collection facilities with a view to preventing wild pigs' access to food residue in the refuse. Field trials would be carried out to examine whether the new design was effective in reducing wildlife's raid. Mr Cheung further explained that wild pigs would become accustomed to accepting food from feeding or scavenging near residential areas, especially when food from these sources typically had higher calorific value than food sources naturally available in country parks, such as

plant matters and insects.

17. Mr Simon Chan supplemented that AFCD had been working closely with relevant departments, especially FEHD, to eliminate food attraction at nuisance black spots by removing food residue, installing metal swing doors at public refuse collection facilities to prevent wild pigs' access and erecting barriers or parapets at bin sites to prevent the toppling of litter bins by wild pigs. These measures were effective in managing wild pig nuisance and significant improvements could be observed at many areas. However, he pointed out that these measures might not be practicable in some areas owing to spatial constraints.

18. In line with the "Take your litter home" message promoted by the AFCD, a Member suggested removing all litter containers in country parks with a view to minimising scavenging of food residue in refuse by wild pigs. She also suggested phasing out cylindrical-shaped litter containers which could be easily knocked over by wild pigs and expressed support for installing fencing or doors at public refuse collection points to keep out wild animals. While acknowledging the enforcement difficulties, she considered that imposing a territory-wide ban against feeding and imposing a fine on offenders could serve as a means of education and could effectively deter feeding activities. A mechanism should be established to facilitate the public to report feeding activities and closed-circuit television could be installed at black spots to identify offenders.

19. Mr Cheung Ka-shing advised that all litter containers were removed from hiking trails in country parks in 2017, except for recreational sites. Meanwhile, FEHD had been replacing cylindrical-shaped litter containers with rectangular bins, which were much easier to be fastened, at nuisance black spots.

20. A Member expressed his support for the proposed enhanced management measures. He shared that he had rarely encountered wild pigs during his many years of conducting field trips in country parks and wild pigs usually feared and ignored human in the past. He was of the view that the emerging nuisance of wild pigs in urban areas was largely due to their loss of natural fear to human owing to repeated contact with people with food as reward. When wild pigs associated people as a stable source of food, there was a greater possibility for them to actively approach people for food and even display aggressive behaviour towards people. As such, he agreed with another Member that the enactment of legislation to ban feeding activities could help promote the awareness of no feeding and deter feeding activities.

21. While pointing out that there were difficulties in clearly defining the scope of the legislation and taking enforcement actions, Mr Cheung Ka-shing mentioned that the Government was open to the idea of imposing a feeding ban and would further study the need and feasibility.

Conclusion

22. The Chairman summarised the views of Members. He considered that it was important to have a clear objective for the management of wild pigs, i.e. protecting the habitat and populations of wild pigs in the natural environment while alleviating human-wildlife conflicts. He further suggested that the reinforced design of refuse collection facilities to prevent wildlife raids should take into consideration the ease of operation by cleansing workers, such that these facilities would be operated as intended. The Chairman expressed appreciation for the establishment of an expert panel to review the management strategies of wild pigs. He suggested that non-governmental experts and/or organisations, such as the Kadoorie Farm and Botanic Garden, the Society for the Prevention of Cruelty to Animals and animal welfare groups, should also be involved to gauge comprehensive views and share information on wild pig management. Considering the difficulties in introducing new legislation, he suggested that AFCD could collaborate with FEHD to examine the existing regulations and strengthen the promotion with a view to increasing the awareness of no feeding of all wild animals.

23. Mrs Vicki Kwok thanked Members for their comments and suggestions and invited them to share their views on wild pig management in public with a view of enhancing public awareness on the issue. She stressed that both EPD and AFCD attached high importance to the communication with different stakeholders to clearly explain the proposed enhancement measures. The Government would further consult the EA Panel on the proposed enhancement measures in January 2019.

Item 4 : Any Other Business

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

Item 5 : Date of next meeting

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

26. As this was the last meeting of NCSC of the current term, the Chairman and Mrs Vicki Kwok took the opportunity to thank Members for their contributions in the past two years.

**Nature Conservation Subcommittee Secretariat
February 2019**