Division Column

An Unusual Record of Green Turtle Nesting on Tai Long Wan Beach, Sai Kung East Country Park in 2006

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去年9月下旬,有市民在西貢東郊野公園的大浪灣沙灘發現綠海龜產卵。鑑於天氣及環境因素,本署決定將其中65枚龜卵遷移到室內進行人工孵化,餘下的18枚則留在沙灘作天然孵化。人工孵化成功率達86%,天然孵化的成功率亦有67%。小綠海龜暫時由本署飼養,稍後將於天氣較穩定及回暖後放回海洋生活。

南丫島深灣是香港目前唯一有綠海龜定期產卵的地方。根據記錄,西貢大浪灣在過去30多年均未有海龜產卵。本署會在大浪灣進行監察,留意會否繼續有海龜產卵。

On 22 September 2006, Lisa Christensen and her friends found a green turtle (*Chelonia mydas*) nesting on Tai Long Wan beach in Sai Kung East Country Park. They carefully removed the trace of nesting and reported the case to the Wetland and Fauna Conservation Division on 4 October. This was possibly the last nesting in the season as we did not find any trace of further nesting. Later on 3 November 2006, Vanda Kennedy, who also witnessed the nesting, found 2 dead hatchlings at the same site. The timing suggested that the dead hatchlings might come from a nesting before the one on 22 September 2006 and it was likely that the mother turtle laid at least 2 nests of eggs in Tai Long Wan this summer.



Fig 39. Excavated nest, showing the top few layers of eggs.

Though the nesting site is remote and not assessable through public transport, it is a popular beach among the country park visitors. Furthermore, if the eggs were left to hatch on site, the weather was expected to turn cool when the hatchings emerge in late November. As such, it was decided to collect the eggs for artificial incubation. With the assistance of the informants, AFCD visited Tai Long Wan beach and located the nest on 9 October 2006 (Fig. 39). 65 eggs were retrieved for artificial incubation while 18 eggs were left on site as an assurance colony (Fig. 40&41).



Fig 40. Eggs were carefully placed on sand in a bucket for transportation.



Fig 41. Eggs were pencil-marked on the top to prevent drastic displacement of embryos during subsequent handling.

We incubated these eggs in AFCD's laboratory. The hatchlings took 58 to 64 days to emerge (Fig. 42&43). When we revisited Tai Long Wan on 27 November, the hatchlings in the nest were ready to go after 67 days of natural incubation (Fig. 44) and all were brought back for captive rearing because the weather was turning cool. The hatching rates of natural and artificial incubation were 67% (12/18) and 86% (56/65) respectively.



Fig 42. Hatchlings from artificial incubation.



Fig 44. Hatchlings from natural incubation on Tai Long Wan beach.



Fig 43. A hatchling from artificial incubation, showing the opening on the plastron once connecting to the yolk sac. The opening would generally seal up in 2 to 3 weeks.

As it did turn cool in late November, we continue to keep the hatchings in captivity and plan to release them back to Tai Long Wan beach when the weather becomes warmer and stable. This captive rearing of juvenile green turtles is the largest in scale AFCD has ever undertaken. The juveniles are being kept in the Hong Kong Wetland Park and the laboratory of the AFCD, and the Hong Kong Ocean Park (Fig. 45).



Fig 45. Morsels of food, e.g. squids or shrimps, would be placed on tank bottom to provide incentive for the hatchlings to practise diving. Caruncle, also known as egg-tooth, can be seen in the hatchling in front as a small whitish cone just below the nostrils. Hatchlings use it to rupture the egg shells and the feature will disappear in the first few weeks after hatching.

Many beaches in the Eastern and Southern waters in Hong Kong were used to support sea turtles nesting. Nowadays, however, Sham Wan at Lamma Island is the only regular nesting site of Green Turtles in Hong Kong. According to the local villagers, sea turtles have not nested in Tai Long Wan for over 30 years. Whilst we are not sure whether Green Turtles do nest on Tai Long Wan beach recurrently without being noticed, there is no doubt that the current nesting is one of the only two documented records outside Lamma Island in the past few decades. Another recent nesting was on Big Wave Bay Beach, Hong Kong Island in 2000. AFCD is planning to monitor the Tai Long Wan beach to see if there is a stable population of Green Turtles that keeps returning to mate and nest.

6 out of the 7 species of sea turtles in the world are ranked "endangered" or "critically endangered" under the 2006 IUCN Red List. Sightings of sea turtles should be reported to the Wetland and Fauna Conservation Division so that appropriate actions could be taken in good time accordingly. You can report to K.S. Cheung, Wetland and Fauna Conservation Officer (Monitoring) by phone at 2150 6922 or e-mail to ks_cheung@afcd.gov.hk

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A New Camellia Record for Hong Kong, Camellia furfuracea (糙果茶), and Its Propagation Trial

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本署的香港植物標本室最近在大圍的均背灣記錄了一種本港新發現的茶花,名為糙果茶。故名思意,糙果茶的果表面粗糙有糠秕,正是其拉丁學名 furfuracea 所含的意思。在欠缺花或果作識別的情況下,糙果茶容易與大苞山茶混淆。本署收集了一批糙果茶的種子進行人工繁殖,初步結果顯示發芽率達九成之高,相信可以進一步繁殖這個本地稀有的品種作保育用途。

The Hong Kong Herbarium recently recorded and propagated a new species of Camellia *Camellia furfuracea* (Fig. 46) in Hong Kong.



Fig 46. Camellia furfuracea at Au Pui Wan.

While verifying previous plant records from different sources, we noticed a seemingly new locality of *Camellia granthamiana* besides its type locality at Tai Mo Shan. The "new" location record was Au Pui Wan, which is an abandoned village about 4 km north of Tai Wai just outside the Tai Po Kau Nature Reserve.

In 2004 we surveyed Au Pui Wan with an attempt to collect voucher specimens and gather further information of this new record of *C. granthamiana*. The site is adjacent to a sheltered valley and the population is under woodland canopy. Interestingly, we noticed a fruiting population of Theaceae plants with slightly impressed veins on shiny serrated leaves. The plants, especially the leaves, indeed much resemble those of *C. granthamiana*. However, closer examination of their fruits (Fig. 47) revealed that they are a different species. The fruit has rough and hairy surface, is much smaller (2-4 cm in diameter) and not as red as that of *C. granthamiana* (6cm in diameter). Each fruit has 3 free styles remained at the apex, whereas the fruit of *C. granthamiana* has only one style (Fig. 48). Upon comparison with identified specimens deposited in the Hong Kong Herbarium and relevant literature, the Theaceae species was later identified as *Camellia furfuracea* (Merr.) Coh. Stuart. The common Chinese name (機果茶) and the