

## **Conservation of the endangered Golden Coin Turtle *Cuora trifasciata* in Hong Kong - Problems and Solutions**

**Dr. Michael Lau**

**Senior Conservation Officer, Kadoorie Farm and Botanic Garden**

Hong Kong should be a safe haven for turtles because of the wild animals protection ordinance, the protected country parks as well as a wealthy and sympathetic society.

Golden coin turtles are found in South China, including Guangdong, Guangxi, Hainan, Fujian and Hong Kong. They can also be found in northern Vietnam and northern Laos. Also known as the Chinese three-striped box turtles, they have a better defense ability than other box species as they have a unique, hinged shell design that enable them to completely close their shell like a box after withdrawing their head and limbs. This design gives total protection to their soft tissues when they are threatened by predators.

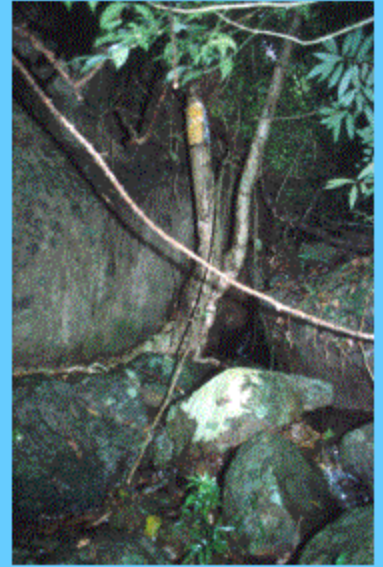
The golden coin turtles are used in traditional Chinese medicine. Recent claims that they can cure cancer have driven up demand for the species in southern China, which has become more affluent since China opened up its economy in the 1980s. An adult golden coin costs as much as HK\$10,000 (US\$1,300) in Hong Kong. The high market value for golden coin turtles leads to over-collection, and they have disappeared over much of their range. In Vietnam, villagers say they can exchange a baby golden coin turtle for a buffalo. Similarly, some mainland Chinese will have enough money to build a house if they were able to catch an adult golden coin turtle and sell it!

"In some remote places, villagers no longer farm their land but spend most of their time in the wild searching for golden coin turtles - a find which can make them rich instantly," Lau said.

Fortunately, Hong Kong has a better protection for turtles and the golden coin species can still be found in places including the New Territories, Lantau Island and some small outlying islands. However, large-scale trapping started few years ago and this has reduced the number of golden coin turtles in the wild. The traps found were mostly simple in design and made of wire mesh and plastic chains. Other devices include pitfall traps, with plastic buckets hidden underground and dead fish serving as bait at the bucket mouth. Trappers also camouflaged the traps with plants. Some notices were found near the turtle habitats, with mobile phone numbers printed on them and notes saying that turtles found could be exchanged for money. Trappers would normally return to the sites where their traps had been confiscated previously, showing a disregard for efforts to control the illegal actions.

# Turtle trap surveys

- ◆ KFBG pilot study in 2000 found turtle traps in 3 out of 5 sites
- ◆ AFCD sponsored the KFBG trap survey study from Oct. 2000 to Feb. 2001
  - 305 traps found in 27 of the 35 study sites
  - 1 trapped Golden Coin Turtle rescued
  - trappers returned to sites where their traps were removed previously



"The problem (of illegal turtle trapping) is more serious than we had expected," Lau said.

In the baseline study on distribution, population status and illegal trapping of golden coin turtle, five trapped golden coin turtles were recovered and one of them was found dead in the trap. An X-ray of the dead turtle showed that it was pregnant with three eggs. But upon dissection, the eggs inside the turtle were already stinking, suggesting that the turtle had already decomposing.

# Baseline study on the distribution, population status and illegal trapping of Golden Coin Turtles in Hong Kong

- ◆ 1099 traps found in 59 of the 86 sites studied
- ◆ 5 trapped Golden Coin Turtles (one dead in trap), 2 Big-headed Turtles and 2 Chinese Pond Turtles
- ◆ AFCD found an additional 596 traps and 2 dead turtles



In theory, the wild population of the golden coin turtles can be estimated by judging frequency with which turtles being repeatedly trapped. But this scientific approach is almost impossible under the present conditions. Conservationists found that once their traps were placed, many illegal traps were subsequently found next to their traps, making it dangerous to release any trapped turtles back to the same spot. The turtle population in some heavily trapped sites is estimated to have reduced by more than 50 percent, but some golden coin turtles still survive and breed as studies showed that some trapped animals were baby turtles.

Studies on golden coin turtles all point to one thing: despite the large-scale illegal trapping in recent years, it isn't too late to strengthen our conservation efforts and save some of the wild population. Possible strategies include enforcing in-situ conservation with continual monitoring and enforcement and investigation of possible turtle habitats that have not been studied previously. Other actions include public awareness campaigns, tighter control on trade, promotion of scientific research and conservation breeding

program. Lau said a study is being conducted by Cheung Sze-man at the University of Hong Kong on the living pattern of local turtles using radio-tracking techniques.

AFCD has put up signs warning people not to carry out illegal trapping. Frequent operations to confiscate turtle traps can help discourage people from placing new traps.

A license is required in Hong Kong for the possession of golden coin turtles kept by private turtle farms, individuals and traders. But some turtle traders may take advantage of a loophole in the administration: they maintain the number of golden coin turtles specified in the license by refilling any vacancy left open by turtles sold to buyers with new turtles. Therefore, Lau suggested, officials should photograph and record in the license the golden coin turtles being kept by individuals in terms of the plastron pattern, the color pattern on the head as well as the turtle size, ideally shell hatching techniques could be employed to make each individual unique.

## How can you help

- ◆ Report to AFCD if you find any traps in the countryside
- ◆ Try not to buy/consume Golden Coin Turtles
- ◆ If you do wish to obtain Golden Coin Turtle you get them from a legitimate source and apply for a license from the AFCD

