

Possible Records of Yellow-bellied Sliders (Trachemys scripta scripta) or River Cooters (Pseudemys concinna) in Hong Kong

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Photographs by the author.

The Red-eared Slider (*Trachemys scripta elegans*) ranks high among the world's worst invasive alien species (Lowe et al. 2004). It has become naturalized on all continents except Antarctica and is now the most common chelonian observed in Hong Kong (Heidy Kikillus et al. 2010). However, during a visit to Hong Kong in October 2016, I photographed two non-indigenous turtles that did not resemble the typical Redeared Slider. Unfortunately, neither turtle was captured for closer examination, which limited attempts to identify them to analyzing photographs. These photographs were shared with a range of turtle experts for identification, resulting in responses from Paul Crow (Kadoorie Farm and Botanic Garden, Hong Kong) and Coleman M. Sheehy III (Florida Museum of Natural History).

At 1810 h on 22 October 2016, one distinctive turtle was spotted in the artificial lake in Kowloon Park (22.299929°N, 114.169698°E; Fig. 1), a large public reserve located in Tsim Sha Tsui, Kowloon. The lake is enclosed to hold a collection of exotic waterbirds, which has in turn attracted the dumping of pet turtles. The turtle was photographed from afar from various angles as it swam circles around the lake (Fig. 2). The turtle was distinguished from Red-eared Sliders by the longitudinal cream-white stripes that stretched evenly along its head and neck. In particular, the eye was cream-white with a black stripe aligned with the pupil. The temporal stripes were especially wide compared with the dorsal stripes. Unlike the Red-eared Slider, the carapace was not distinctively patterned. The appearance was suggestive of a River Cooter (Pseudemys concinna), which has two subspecies (the Eastern River Cooter, P. c. concinna, and the Coastal Plain Cooter, P. c. floridana); in addition, the Suwannee Cooter (P. suwanniensis) is a close relative that some authorities still consider a subspecies of P. concinna (Iverson et al. 2017). It could have also been a Yellow-bellied Slider (*Trachemys scripta scripta*).

At 1205 h on 25 October 2016, a second distinctive turtle was spotted at the Sai Kung Country Park (22.398762°N, 114.321919°E; Fig. 1). It was evidently a male, as indicated by its long front claws that were visible as it descended from basking on a rock into the river (Fig. 3). It appeared to have been disturbed by my presence and was visible for only a few seconds. Photographs revealed thick yellowish stripes extending from the chin to the neck, with one set converging to form a Y-shape. The upper half of the neck, limbs, and carapace were quite plain and devoid of conspicuous stripes. This turtle could have been a melanistic Red-eared Slider, of which a definitive example was recorded earlier at Hong Kong Park (Fig. 4). However, based on the broad stripes on the chin and neck, this turtle most likely is a Yellow-bellied Slider or a River Cooter.



Fig. 1. Google Earth $^{\odot}$ map showing the locations of non-indigenous turtles observed in Hong Kong.



Fig. 2. A selection of photographs of a distinctive turtle found at Kowloon Park.

That pet turtles are released into parks and waterways in Hong Kong is well known (Lau et al. 2000), and this practice



Fig. 3. A selection of photographs of a distinctive turtle found at Sai Kung Country Park.

has facilitated the establishment of Red-eared Sliders (Ramsay et al. 2007). Although the observations presented here lack accurate species identification, they nevertheless show that other non-indigenous turtles have naturalized in Hong Kong and pose a risk of establishing new populations.

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Fig. 4. A melanistic Red-eared Slider (Trachemys scripta elegans) observed in an artificial lake in Hong Kong Park.

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