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“Ranging Behaviour of Edible Bird Nest Swiftlet (*Aerodramus fuciphagus*) in Kuala Langat District”

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One question that begs an answer on swiftlet is how far do they fly from their homebase in foraging for food. Therefore we embark on a radio tracking study in order to understand their home range use (Kohli *et al.* 2004), movements (Meyburg, 2009) and ranging behavior (Marzluff, 1994) Radio tracking is a technique used by biologists to locate study animals in the field and to transmit information about the ecology and behavior of wild or captive animals (Kenward, 2001).

Edible bird nest swiftlet (*Aerodramus fuciphagus*) is the major currency in the bird nest Industry. Their nests are entirely constructed from saliva that have special biochemical and nutritional properties. This encourage ranchers to set up bird houses for the swiftlet to breed and nest. Although numerous research has been conducted on EBN swiftlet, there is still a dearth of information on their home range size and ranging behavior, which is largely unknown. Answering questions like how far do they fly from their nest, their foraging pattern, habitat usage and exploratory flights or forays would increase our comprehension of the ecology and ethiology of the swiftlett. These valuable information would certainly help the industry in many different ways especially in maintaining a sustainable colony in the long term.

We present a preliminary report of our preliminary radiotelemetry work and the results met in tracking EBN swiftlet.

Capturing the bird

Birds were captured using two methods:

Free ranging birds were captured using mist nets (Newmark, 2010). To assist trapping we use bird calls to attract the bird. The mist nets we raised up to 5m height using extended poles.

In Birdhouse- ranchers were consulted and with their permission we capture the birds from inside the birdhouse- mostly during harvesting season.



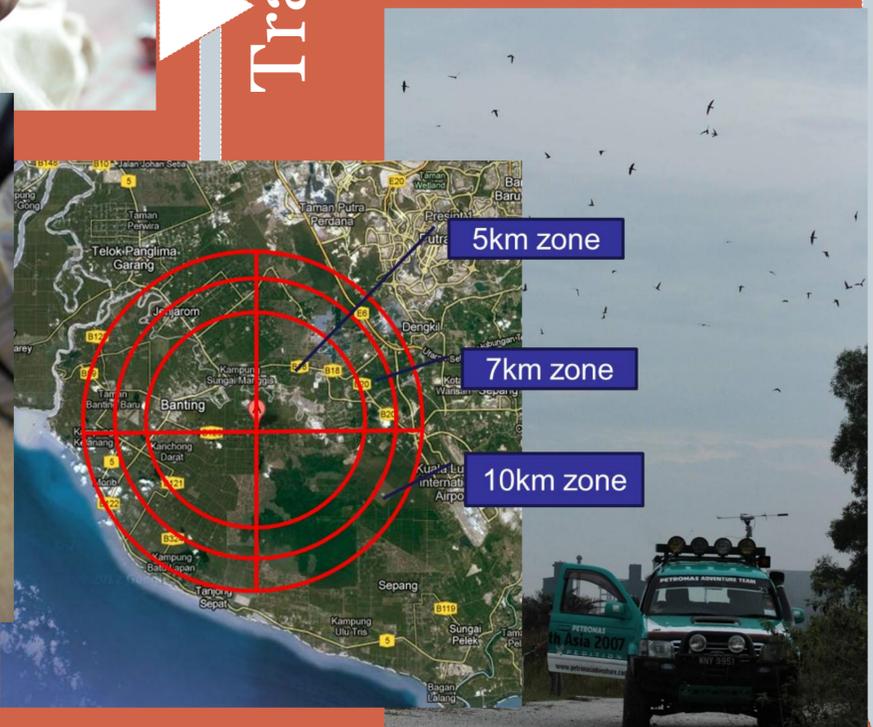
Measuring and tagging

Captured bird must weighed more than 7g. Then we pluck a few feather with tips and sample their saliva for sexual determination. After that, we attach transmitter using glue-on method before release and relocate the bird

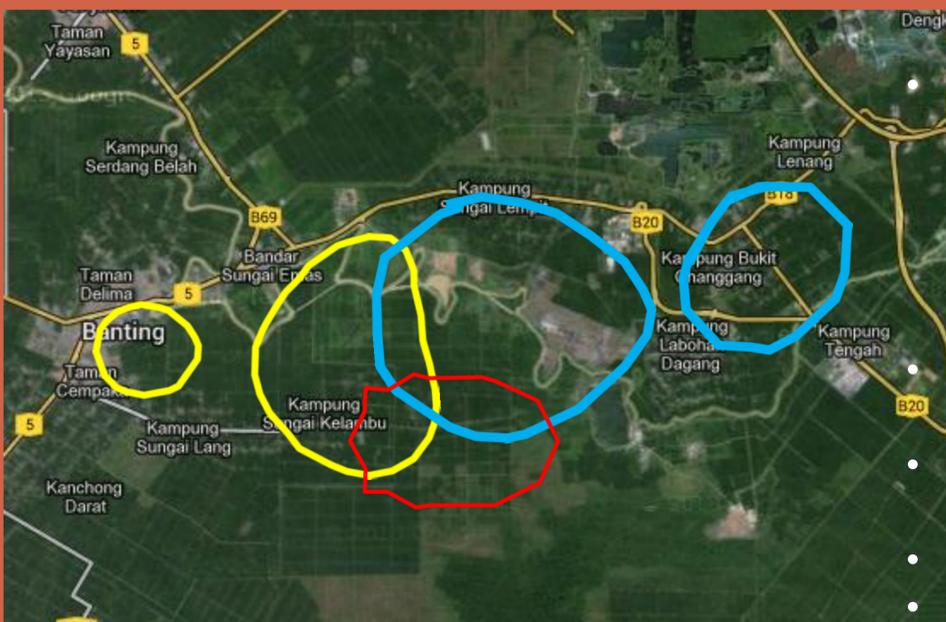


Tracking the bird

Radiotelemetry was used to determine the location of the tagged individual swiftlet. Captured birds were attached with miniature glued-on transmitter that will emit signal and received by a receivers (Advanced Telemetry System, Isanti, MN). To cover a large area, we use a motorized tracking on a 4x4 vehicle with modification where we mounted a antenna to track the birds



Results and Conclusions



Sample	BB1	BB2	BB3
95% kernel contours	42.82 km ²	1038.41 km ²	609.66 km ²
sex	undetermined	Male	undetermined

Swiftlet is a non-peached bird. therefore it is impossible to precisely pin-point their precise location via coordinate triangulation. Therefore, the exact location is used as a data point, with assumption the bird may be in 100m distance within the radius.

The data was analysed using ranges V: 95% kernel analysis (kenward, 2009).

The furthest distance the bird was found traveled is 8km.

The mean area used is 563.63 km²

Mostly they were found roaming in open field such as in young oil palm plantation (<5 years old), and nearby forested area.

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