
Estimating population size and distribution of Indo-Pacific humpback dolphins at Khanom

Suwat Jutapruet, Krisanadej Jaroensutasinee
and Mullica Jaroensutasinee*

Walailak University, Nakhon Si Thammarat, Thailand

**e-mail: ball153@gmail.com*

The population of Indo-Pacific humpback dolphins (*Sousa chinensis*) that inhabits the Khanom sea shore are in critical condition due to a high death rate. This project aimed to estimate the number of Indo-Pacific humpback dolphins by using a Photo-Identification technique. Digital Analysis and Recognition of Whale Images on Network (DARWIN) software was used to identify individual dolphins. All selected pictures were represented by 1 (present) and 0 (absent) in the MARK software. We collected dolphin dorsal fin pictures by boat survey. We went to Pra-Tub Cape pier and took a long tail boat from 7.00 a.m. to 1.00 p.m. We found that dolphins tended to be present in clear water (visibility > 1 m) with no waves (< 20 cm). All survey routes were recorded using a GPS Garmin 76 CSX. Dolphins were found most frequently from Racha Ferry to Kwaeng Pao Bay. We took more than 400 dorsal fin pictures during each survey by SLR digital camera with lenses 18-135 mm and 70-300 mm. We selected the best dorsal fin pictures, and cropped only dorsal fins in order to decrease the picture size of the database in the DARWIN software. Within the two months survey, we could identify 20 individual Indo-Pacific Humpback dolphins in the Khanom area.