

AN OBSERVATION OF EPIMELETIC BEHAVIOR OF *LAGENORHYNCUS OBLIQUIDENS*

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The records of the epimeletic behavior in various cetaceans are documented in Caldwell and Caldwell (1966). On the Pacific whitesided dolphin *Lagenorhynchus obliquidens* Gill 1865, he showed three cases where the behavior was directed to wounded or captured animals of the same species, and another case where it was directed to the dead carcass. The present observation adds another example of the latter, and will show that the behavior is common in this species.

On board of the research vessel Tanseimaru, we had a cruise (KT75-7) for the observation of marine mammals. The cruise started at Toyama ($36^{\circ}46'N$, $137^{\circ}13'E$) on 9 June 1975 and ended at Tokyo on 18 June. During the two days' observation in the Sea of Japan, the surface water temperature was between $17^{\circ}C$ and $21^{\circ}C$, and only two schools of *L. obliquidens* were observed at $39^{\circ}46'N$, $139^{\circ}33'E$ and at $41^{\circ}15'N$, $140^{\circ}16'E$. They were composed of about 30 and 10 animals respectively. In the Pacific area the species was concentrated in the coastal waters between $38^{\circ}N$ and $36^{\circ}30'N$. In the south and north of this range, there, were observed tropical and boreal species respectively (Fig. 1). Among many *Phocoenoides* observed, only one *dalli*-type was confirmed swimming with 5 *truei*-type. The identified *truei*-type were 34 animals.

The sea was calm on 15 June, and at 1300 hr. a carcass of *L. obliquidens* floating on the side by its own buoyancy was found. The position was $36^{\circ}47'N$ $141^{\circ}56'E$. The surface water temperature at the spot was $17.9^{\circ}C$. When the ship approached it to pick up, it was found that the carcass was moving rhythmically by a dorsal fin of the live animal of the same species. As the dorsal fin of the latter was moving vigorously above and beneath the water, it was considered that the animal was tossing the carcass. However, it is sure that the carcass does not sink without this effort. When the ship came at the distance of about 20 m, the dolphin which was larger than the carcass and probably an adult or subadult swam around beneath the carcass. It disappeared when the carcass was caught by a hook and pole. Though we found only one live dolphin near the carcass, the captain Mr. K. Ueno who stayed at a higher place observed two *L. obliquidens* of the same size swam away from the carcass. At this spot, there was observed no other dolphins in the sight.

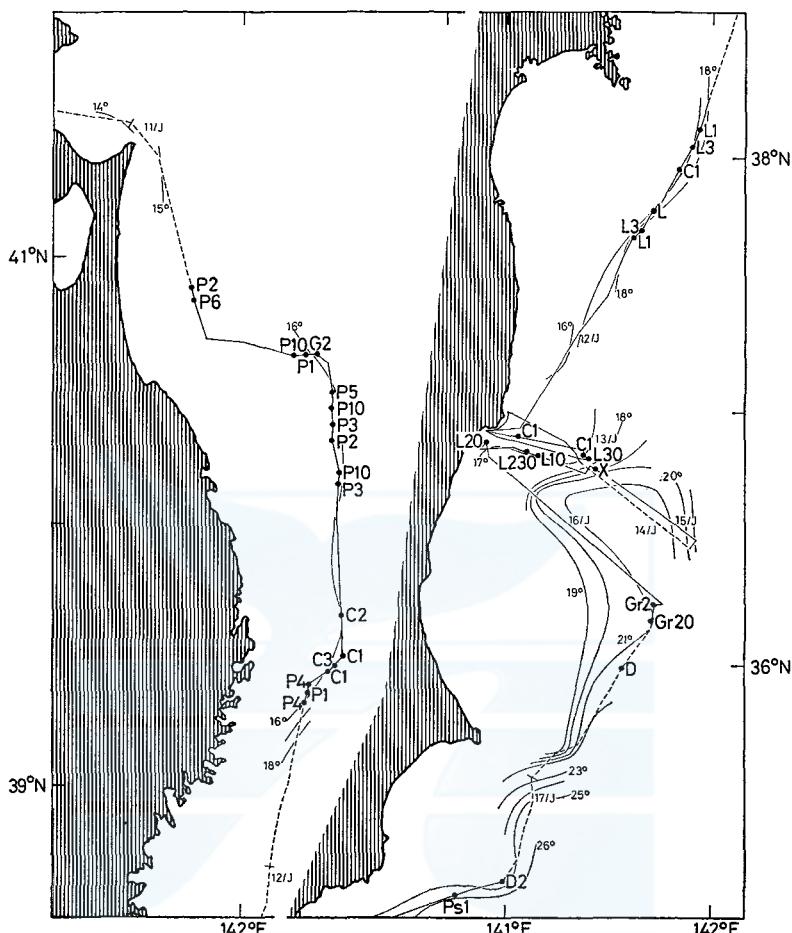


Fig. 1. Distribution of marine mammals and surface water temperature ($^{\circ}\text{C}$) observed from 11 June to 17 June 1975. C: fur seal, D: dolphinids unidentified, G: *Globicephala* sp., Gr: *Grampus griseus*, L: *Lagenorhynchus obliquidens*, P: *Phocoenoides*, Ps: *Pseudorca crassidens*, X: carcass of *L. obliquidens*. Numerals by the species indicate the number of individuals, and the dotted line course passed in the night.

The dead dolphin was a young male measuring 176 cm in body length. On the decalcified and stained tooth slide, there were observed three postnatal dentinal layers stainable by haematoxylin. The first stainable layer was thin, and the last was wide and situated on the pulp wall. If the layer is formed annually and the stainable layer is accumulated in the season from autumn to spring as in the case of *S. attenuata* (Kasuya 1976), the age of the dead animal can be little more than two years. There was found no external or internal injury on the carcass. The carcass was already cold and the skin and muscle were very fresh, but the internal organ showed a very slight smell of decomposition. The stomach was empty. The several barnacles found at the posterior edge of tail fluke were identified by Dr. T. Yamaguchi to be

Xenobalanus globicipites Steenstrup 1851. Possibly the dolphin died of some natural cause in the preceding day and had been floating since the death. Though the succorant behavior may not be rare in this species (Caldwell and Caldwell 1966), it is not known in the present case if the live dolphins were continuously with the carcass after the death.

REFERENCES

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