

**D-36: Mortality of green turtle (*Chelonia mydas*) embryos and hatchlings in relation to clutch size**

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Artificial hatchery programmes are implemented in Sri Lanka as a means of conserving marine turtles. This study was carried out to find the relationship between the embryo and hatchling mortality and the clutch size of *Chelonia mydas* in hatcheries.

Data collected was based on 64 transplanted nests at the Kosgoda Victor Hasselblad Turtle hatchery between Dec. 1988 and Nov. 1989. Nests were excavated 4-6 days after the emergence of hatchlings. Contents remaining in the nest were categorised according to the developmental stages.

A positive relationship existed between the clutch size and the late mortality stages (late embryos plus early hatchlings ( $r=0.33$ ;  $p<0.01$ ) while there was no relationship between the clutch size and the early mortality of embryos. The total mortality showed a positive relationship with the clutch size ( $r=0.36$ ;  $p<0.01$ ). The percentage of live hatchlings showed a negative relationship with the increasing clutch size ( $r = -0.32$ ;  $p<0.05$ ). A significant reduction in the percentage of live hatchlings occurs when the number of eggs is around or  $>120$ . Therefore dividing and transplanting green turtle egg clutches with  $>120$  eggs into 2 nests results in higher percentage of live hatchlings.

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