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INTERNATIONAL REVIEW PANEL

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PREVENTING SEPARATION OF COW-CALF PAIRS DURING PURSE-SEINE SETS

At the 30th meeting of the IRP, during the discussion of the technical guidelines for avoiding high mortality in sets on large herds of dolphins, the Secretariat was asked to investigate whether useful guidelines could be recommended for avoiding separating dolphin calves from their mothers during the fishing operation.

Scientists of the U.S. National Marine Fisheries Service (NMFS) (Archer *et al.* 2001) have described potential scenarios during which unobserved calf mortality could occur caused by separation from their mothers during the chase phase of the fishing operation. No evidence is presented to support this contention. For mammals, however, much evidence is available that demonstrates the extreme lengths to which mothers will go to stay with and protect their young, even when being chased by predators (*e.g.*, Kevles, 1986). For cetaceans, whalers used the protective behavior of cows toward their calves to increase their catches (Caldwell and Caldwell, 1966) and adult dolphins have been observed defending young calves against sharks, despite the risk to themselves (Springer, 1967). During a 30-year study of bottlenose dolphins in Florida, often involving short chases and encirclement, no cases of permanent separation of cows and calves have been recorded; even when one of the pair was encircled and the other was not, the free-swimming animal typically remained just outside the net until the captured animal was released. For spotted dolphins associated with the purse-seine fishery, dolphins have been observed waiting outside purse-seine nets until of the rest of the herd was released, suggesting that separations that may occur are only temporary. Capture-recapture studies of three female spotted dolphins with calves showed that the cow-calf bond remained intact, even after up to seven sets over seven days.

Given the lack of any evidence that mother-calf separation has occurred, it is difficult to propose useful measures on how to prevent it. The Secretariat's view is that there is little point in pursuing this further at this time. However, if the Parties wish to investigate, the first step would be to interview captains to see if they have any experience in either calves being in particular parts of the herd during a chase or of seeing cow-calf separations.