

Pup 10's weight drop from 19 kg to 15 kg over 13 days (at six to eight weeks of age) following her final formula feed represented a 21% weight loss, which is apparently normal (Muelbert and Bowen 1993). Her diving behavior from that time in a normal foraging area and subsequent rapid weight gain suggested that she (in common with 70% of the pups studied by Muelbert and Bowen [1993]) had begun to feed effectively within two weeks of weaning. However, to allow for rehabilitated pups being amongst the bottom 30% of slower-learning pups, it might be wise to retain a 18–19 kg pup for an additional week on the high-fat diet, to be released at 20–21 kg and thus allow a wider safety margin for "slow learners." A longer period than this might be counterproductive, since the pups would merely acquire the impediment of surplus blubber while missing the important postweaning developmental stage of inshore orientation and catching of diminutive prey.

Finally, it should be noted that some earlier follow-up studies of harbor seals released from rehabilitation or longer-term holding in captive facilities have found poor survival or abnormal behavior (Picken 1978; Harvey et al. 1983, Harvey 1987). However, a California radio-tagging study of rehabilitated pups indicated known (i.e., minimum) survival of 44% at 100 days (Morgan et al. 1993), and participation in local haul-outs by at least some pups. In contrast, Tougaard (1996) emphasizes that rehabilitation environments are totally unnatural and also claims that radio-tagging research in Denmark (details and sources not given) has shown that rehabilitated pups do not behave normally when compared to wild pups. Stranded harbor seal pups in Denmark are now euthanized, partly as a precautionary measure against the hypothetical spread of pathogens by rehabilitated pups after release (Tougaard 1996). However, an alternative approach might be to rethink and possibly consider some redesign of rehabilitation procedures for young

pups according to developmentally valid criteria.¹ Three of the case studies reported here have suggested that a revised approach might incorporate a much shorter time in rehabilitation and an exclusively liquid, high-fat diet during this period. The success of both old and revised approaches should continue to be tested with follow-up studies after release.

Endnote

¹Although this discussion relates specifically to harbor seal pups, similar consideration might be given to the rehabilitation of pups of the grey seal and other phocid species, with due regard being paid to differences between species in natural preweaning and postweaning developmental parameters.

References for Overview and Postscript

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