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5. ACTIVITY VARIABLES POSSIBLY AFFECTING CUMULATIVE IMPACTS

As noted in the previous section, the workshop participants recognized that the activities carried out at visitor sites as well as the characteristics of the sites may affect the nature and severity of possible cumulative impacts. For example, they recognized that both the timing of visits relative to the life cycles or breeding chronologies of species present at sites, and the number, frequency, and length of visits can affect the nature and severity of impacts. That is, visits that occur during egg laying, incubation, formation of mother-pup bonds, or other critical times in the life cycles of wildlife present at visitor sites have a higher likelihood of impacting biologically important behaviors than do visits carried out at other times of the year. Similarly, long visits carried out multiple times a year over many years are more likely to have cumulative impacts than fewer, shorter visits.

Other activity-related variables likely to affect the nature and severity of possible cumulative impacts include the number of visitors ashore at any one time, how long they are at the site, where they go and what they do while ashore, and how well they are briefed before hand and obey the do's and don'ts for particular sites. As a general rule, the likelihood of cumulative impacts at sites with potentially vulnerable wildlife or other features can be expected to increase in proportion to the length and frequency of visits, and the number of visitors allowed ashore at any one time. The likelihood of many possible cumulative impacts can be substantially reduced by educating visitors before they go ashore as to what they should do to avoid impacting wildlife or other vulnerable features of the site, and by supervising visitors while ashore to ensure that they comply with the applicable guidelines.

Determining whether ship-based tourism may be responsible for observed changes in the characteristics of visitor sites will require reliable information on the activity variables noted above.

6. POSSIBLE IMPACT AVOIDANCE/ MITIGATION MEASURES

Given the preceding, the workshop participants noted that a range of measures could be taken to avoid, minimize, or mitigate the possible cumulative impacts of ship-based tour operations. They include the following:

- **Limit the Number of Visits and Visitors to Particular Sites.**

As noted above, the likelihood of cumulative impacts can be expected to increase in proportion to the number and frequency of visits to particular sites and what visitors do while at those