

to determine if there was a seasonal difference in group size of bottlenose dolphins in Savannah, Georgia. Surveys were conducted in the estuaries around Savannah, Georgia from 2009 to 2012. The summer field season ranged from April through September and non-summer season was October through March. Temperature, salinity, and group size of dolphins were compared for sightings in summer and non-summer seasons. Group size in Savannah, Georgia was larger during the summer season (5.0 ± 0.72 dolphins) than the non-summer season (2.6 ± 0.03 dolphins; $p < 0.0001$). The range for the group size of dolphins in the summer was also larger (1-35) than the range in non-summer (1-9). The preferred prey of bottlenose dolphins may be patchier or may migrate during cooler months, resulting in smaller groups of dolphins or movement of dolphins out of the study area. In future studies, understanding seasonal abundance of bottlenose dolphins would elucidate if changes in group size are due to movement out of the area. Movement out of the area would have implications for delineation of stock structure. In addition, prey abundance should be compared across seasons to determine if prey availability is correlated with changes in group size.

Winter occurrence of minke whales (*Balaenoptera acutorostrata*) in the South Atlantic Bight

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In the western North Atlantic, the winter distribution of minke whales (*Balaenoptera acutorostrata*), and the location of their calving grounds, are poorly known. Mitchell (1991) used rare sightings of adults and calves to suggest that minke whales winter from the West Indies east to Bermuda. Here we report recent survey data that suggest minke whales also utilize offshore waters of the South Atlantic Bight during winter. We conducted monthly aerial and long-term acoustic surveys at two offshore sites - Onslow Bay, NC and Jacksonville, FL - from June 2007 to April 2011, and January 2009 to April 2011, respectively. Minke whales were visually detected twice at the Onslow site and nine times at the Jacksonville site, during the months from December to February. Calves were observed a single time at each of the two survey sites. At each site the number of acoustic detections exceeded visual observations; minke whales were acoustically detected from November through April. A review of minke whale sightings (n= 22) made available by the North Atlantic Right Whale Consortium (1980-2010) suggests a similar seasonal and geographical distribution pattern in the mid- and southeast Atlantic. Since 1992, all nine recorded strandings of minke whales in the southeast US have been of calves, and seven of these stranded in winter or spring (data provided by NOAA SER). These recent data add to the results of Mitchell (1991) and suggest that the winter migratory and/or calving grounds extend to the offshore waters from North Carolina to Florida.

Seasonal and Diurnal Behavioral Patterns of Bottlenose Dolphins, *Tursiops truncatus*, that Exhibit High Site and Low Site Fidelity to Mississippi Sound

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This study examined how the seasonal and diurnal behavioral patterns of bottlenose dolphins (*Tursiops truncatus*) that exhibit high site fidelity to the Mississippi Sound differ from dolphins with lower site fidelity. Opportunistic surveys conducted from July 2006 to April 2010 were analyzed. Statistical analyses consisted of parametric tests (pairwise correlations, multiple regression, multivariate analysis of covariance (MANCOVA)), which relied on sighting averages of group members to represent site fidelity, as well as nonparametric tests (Pearson's chi-square), which compared high site fidelity, mixed, and low site fidelity groups. Behavioral patterns significantly differed between site fidelity groups across seasons and diurnal periods. Feeding behavior was observed significantly more often in lower site fidelity groups across seasons. Mixed groups were observed milling significantly more often across seasons and diurnal periods. These findings suggest that low site fidelity groups may migrate through the Mississippi Sound to pursue seasonal prey species and interact with high site fidelity dolphins. Sighting patterns of dolphins also suggest the Mississippi Sound is characterized by seasonal migrations during the spring and summer of low site fidelity dolphins as well as high site fidelity dolphins that are potential

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