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Bottlenose dolphins (*Tursiops truncatus*) in Bahía San Antonio, Patagonia, Argentina: behaviour, social composition and abundance.

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A photo-identification study was performed during 33 days (2010) in Bahia San Antonio, Patagonia, Argentina, to assess the behaviour, social composition and abundance patterns of Bottlenose dolphins in this area. The total effort resulted in 14 boat-based (9 positive) and 8 land-based surveys (7 positive). From these land-based observations a sighting frequency of 0.20/h could be obtained. Results indicated that dolphins spent most of their time travelling followed by feeding and socializing. The population estimate of 66 individuals (Cl 95%=64-76) was slightly lower than the estimate of Vermeulen & Cammareri (2009, unpublished data), and could be attributed through the fact that the local abundance was not yet at its peak. The half weight index was used to determine coefficients of association (CoA) for 10 individuals that were seen ≥ 5 times in 10 encounters (where more than 50% of the individuals of the group could be positively identified). The distribution of the coefficient of associations (CoAs) was relatively high, with most dolphins showing medium to high associations. This could be attributed to behaviourally specific associations preferentially during foraging. However, the best fit model further suggested that the population of Bahia San Antonio exhibits rapid dissociations and constant companions and that preferred associations may not be stable over time lags. Further, the large variation in group size, the low modularity and the frequent change in subgroup clustering indicate that the Bottlenose dolphins in BSA are living in a fissionfusion society.

