

SIGNATURE WHISTLES IN A LONG FINNED PILOT WHALE (*Globicephala melas*) POD OFF VENTOTENE ISLAND (SOUTHERN TYRRHENIAN SEA, ITALY).

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Long finned pilot whale (*Globicephala melas*) has a various acoustic repertoire, associations between social behavioural context and vocalisation type have been documented, however little is known about the degree of stereotypy of whistles and data for the “signature” function are still limited. A single stable pod seasonally resident off Ventotene Island has been monitored since 1995 (Mussi et al. 2000). Through the years, whales’ number in the pod decreased from 6 to 2. Acoustic recordings were synchronically collected with behaviour, photo and video data. The observations were carried out on board sailing boats, equipped with towed hydrophones (10 Hz- 20kHz frequency response). From 1995 to 2002, a total of 30 hours of extended recording were collected on a Hitachi 88EX and Sony TCD-D100 DAT recorders. Recordings were later digitised at 24 kHz and spectrograms made, using a real-time analyser. All whistles (n=899) were classified in different categories based on their shape, following the scheme of Taruski (1979) and Weilgart and Whitehead (1990). Calls were assigned to whales by observing air bubbles released simultaneously to the sound production (McCowan and Reiss, 1995) during bow ride behaviour. 723 whistles were consequently attributed to four different individuals: Cagliostro adult male, the “pilot”, Santiago, adult male, Pan, juvenile male and Señora, adult female. Results showed that whales produced mostly (80%) their own signature call that remains stable over long periods of time and its frequency versus time “contour” shows a high degree of stereotypy. Male’s individual calls were found to be predominant (90%).