

## Project Update: June 2018

We started field surveys in February 2018. The first step was to build key contacts with the fisherman community from selected sites in Ratnagiri, Devgad, Malvan and Vengurla. This was initiated in coordination with the Konkan Cetacean Research Team and other central marine fisheries research institute working in similar area to provide updates on sighting, stranding's and incidental captures (bycatch).

We visited the fisherman cooperative society from the villages and sensitised them about the proposed project. With their support, we started monitoring the hotspot zones identified by small-scale artisanal fisherman as areas where marine mammals and sea turtles are commonly found.

Fisheries-dependent, opportunistic, boat-based surveys is has been initiated in cooperation with gillnet fishermen to document any entanglements, depredation by dolphins or porpoises, as well as dolphin occurrence, distribution patterns, and behaviour. We also recorded catch size, composition, and diversity during fishing operations and at landing sites.

In parallel, we have also started a socio-economic study by developing standard questionnaires and initiating interviews with fishermen in different coastal villages to help learn about their fishing practices, perceptions, and cultural and socio-economic significance of marine mammals and sea turtles.

Beach surveys are being done to record any stranded marine mammal and/or sea turtle carcasses and collect morphometrics and genetic samples. So far, we have recorded 11 stranded carcass of *lepidochelys olivacea*, Genetic sample have been taken from three sea turtles and three cetaceans (Indo-Pacific humpback dolphin, Indo-Pacific finless porpoise, and an unidentified Balaenopterid).

### Photographic Documentation of Boat Based Sightings



Left: *Sousa plumbea* travelling. Right: *Sousa plumbea* feeding.



*Sousa plumbea* travelling.



Depredation from fishing nets.



Depredation from fishing nets.

**Table 1. Sighting Observations cetacean**

Sr.no	Date	Time	Latitude	Longitude	Location	Species	Behaviour	Group Size / Number	Catch composition
1	22/02/2018	17:30	N15 54 30.26	E73 35 18.61	Vengurla - kelus	<i>Sousa plumbea</i>	Socializing	(2-4) / 10-16	
2	23/02/2018	9:30	N15 54.522	E73 35.239	Vengurla – kelus	<i>Sousa plumbea</i>	Travelling and Feeding	(2-6) / 55-60	<i>Rastrelliger kanagurta</i> , <i>lactarius lactarius</i> <i>Epinephelus diacanthus</i> <i>Secutor insidiator</i> , <i>Siganus canaliculatus</i> , <i>scienids</i> , <i>Alepes keni</i> , <i>saurida tumbil</i> , <i>Portunus pelagicus</i>
3	23/02/2018	18:40	N15 58 7.85	E73 30 4.36	Malvan- Devbag	<i>Sousa plumbea</i>	Travelling	(2) / 2	
4	24/02/2018	12:12	N15 58.698	E73 29.388	Malvan- Devbag	<i>Sousa plumbea</i>	Travelling	(2) / 4	
5	25/02/2018	19:04	N16 17.174	E73 24.487	Devgad – Tambaldeg	<i>Sousa plumbea</i>	Oportunistic feeding	(1) / 2	
6	15/03/2018	18:13	N16 38 16.57	E73 19 27.17	Ratnagiri- Ambolgad	<i>Unidentified</i>	Travelling	(2-4) / 6-8	
7	16/03/2018	13:00	N16 20 4.47	E73 23 26.63	Devgad- Kunkeshwar	<i>Sousa plumbea</i>	Travelling	(3) / 3	
8	17/03/2018	16:43	N15 51 12.70	E73 37 0.69	Vengurla -Fish market point	<i>Sousa plumbea</i>	Travelling to near shore water	(2-4) / 8-10	
9	03/04/18	18:00	N15 54 12.41	E73 35 28.04	Vengurla – kelus	<i>Sousa plumbea</i>	Feeding	(1-2) / 8	
10	04/04/18	6:38	N15 54.400	E73 34.657	Vengurla – kelus	<i>Sousa plumbea</i>	Oportunistic feeding	(1-2) / 4	<i>Jelly fish</i> , <i>Rastrelliger kanagurta</i> , <i>sardinella fimbriata</i> , <i>Secutor insidiator</i> , <i>Seasnakes</i> , <i>Portunus pelagicus</i> , <i>calapa loφος</i> , <i>Starfish</i> , <i>Metapenaeus affinis</i> , <i>Femmeropenaeus indicus</i> , <i>Epinephelus diacanthus</i> , <i>Puffer fish</i> , <i>Saurida tumbil</i>
11	10/05/18	17:30	N16 21.748	E73 22.633	Devgad Light house	<i>Unidentified</i>	Travelling	35-45	
12	13/05/2018	12:59	N16 02.893	E73 27.765	Malvan-killla	<i>Sousa plumbea</i>	Travelling	(2) / 2	
13	20/05/2018	7:10	N17 00.083	E73 16.189	Ratnagiri- Bhagvati bunder	<i>Sousa plumbea</i>	Travelling/ Feeding	(1-2-4-6) / 33	
14	21/05/2018	7:10	N17 00.083	E73 16.189	Ratnagiri- Bhagvati bunder	<i>Sousa plumbea</i>	Oportunistic feeding as well as Hunting and travelling	(2-4) / 25	<i>Sardinella fimbriata</i> , <i>Rastrelliger kanagurta</i> , <i>Ribbonfish</i> , <i>Mullet</i> , <i>scienids</i> , <i>Uroteuthis duvauceli</i>

**Table 2. Stranding Observations cetacean**

Sr.no	Date	Time	Latitude	Longitude	Location	Species	Condition	Number
1	25/02/2018	17:22	N16 17 3.56	E73 24 32.14	Devgad -Tambaldeg	<i>Unidentified whale Vertebra</i>		1
2	25/02/2018	18:39	N16 17.024	E73 24.533	Devgad -Tambaldeg	<i>Neophocaena phocaenoides</i>	Observed Stranded specimen	1
3	14/03/2018	9:08	N17 11 27.30	E73 15.462	Ratnagiri -Malgund	<i>Sousa plumbea</i>	Observed Stranded specimen	1
4	8/5/2018	8:29	N16 20.661	E73 23.315	Devgad Meeth mubri beach	<i>Unidentified whale Bone</i>		1
5	12/05/18	7:47	N15 58 47.18	E73 29 37.02	Malvan- Devbag	<i>Sousa plumbea</i>	Observed Stranded specimen	1
6	18/05/2018	16:33	N17 10 58.6	E73 15.157	Ratnagiri-Malgund	<i>Sousa plumbea</i>	Observed Stranded specimen	1
7	14/06/2018	8:30	N18 53 9.21	E72 54 30.11	Uran- Khardanda	<i>Unidentified Balaenopterid species</i>	Observed Stranded specimen	1

**Table 3. Stranding Observations Turtles**

Sr.no	Date	Time	Latitude	Longitude	Observation	Location	Species	Number
1	20/2/2018	9:05	N16 21.300	E73 22.079	Dead carcass floating	Devgad-Meeth mubri	<i>lepidochelys olivacea</i>	1
2	23/02/2018	18.48	N15 589.19	E73 30 3.04	Stranded carcass on beach	Malvan- Devbag	<i>lepidochelys olivacea</i>	1
3	25/02/2018	17:09	N16 17.101	E73 24.510	Stranded carcass, entangled in Ghost net	Devgad –Tambaldeg	<i>lepidochelys olivacea</i>	1
4	25/02/2018	17:23	N16 16.913	E73 24.577	Stranded carcass on beach	Devgad –Tambaldeg	<i>lepidochelys olivacea</i>	1
5	25/02/2018	17:37	N16 16.698	E73 24.610	Stranded carcass on beach	Devgad –Tambaldeg	<i>lepidochelys olivacea</i>	1
6	25/02/2018	17:41	N16 16.613	E73 24.636	Stranded carcass on beach	Devgad –Tambaldeg	<i>lepidochelys olivacea</i>	1
7	8/3/2018	7:44	N15 59 09.9	E73 29 24.4	Stranded carcass on beach, Rope entanglement	Malvan- Devbag	<i>lepidochelys olivacea</i>	1
8	12/05/18	7:53	N15 58.939	E73 29.600	Stranded carcass on beach	Malvan- Devbag	<i>lepidochelys olivacea</i>	1
9	12/5/2018	8:23	N15 59.331	E73 29.353	Stranded carcass on beach	Malvan- Devbag	<i>lepidochelys olivacea</i>	1
10	14/05/2018	19:30	N16 17.723	E73 24.327	Stranded carcass on beach	Devgad –Tambaldeg	<i>lepidochelys olivacea</i>	1
11	16/05/2018	14:52	N16 19 48.59	E73 23 36.40	Stranded carcass on beach	Devgad- kunkeshwar	<i>lepidochelys olivacea</i>	1