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Unusual weather condition causing the transfer of seahorses *Hippocampus kuda* onto the sandy beach of Sindhudurg district, Maharashtra

While surveying for raptors along the Achara beach in Malvan taluk of Sindhudurg district, Maharashtra, seahorses *Hippocampus kuda* belonging to the family Syngnathidae were noticed on the beach on 23 June 2015. All seahorses belong to one genus *Hippocampus*, in which there are 34 species recognized all over the world[1–4]. Despite their small size, seahorses form a valuable fisheries resource in some areas and support a sizeable international trade. Hence all *Hippocampus* species are listed under Appendix II of the CITES and are categorized as vulnerable in the IUCN 2015 Red List of species[5,6]. The Government of India has banned the export permits for all Syngnathids and kept them under Schedule-I of the Indian Wildlife (Protection) Act, 1972. This communication documents the environmental condition rather than the trade aspects associated with seahorses in Malvan taluk.

We observed four individuals of seahorses *Hippocampus kuda* on the Achara beach (16°11′59.91″N, 73°26′6.65″E) (Figure 1). Their length was found to vary between 12.5 cm to 18 cm, three were found thrown alive onto the beach by the waves that lashed the coast in our presence. We also found one dead specimen on the beach. They seemed to be stranded and were unable to move back into the water. Therefore, we photographed the seahorses, measured their length and released them back into the sea. We attribute this unusual find of the seahorses on shore to the high wind velocity measuring up to 25 miles/h (Figure 2) during the afternoon from 1300 to 1400 h on 23 June 2015 on a day which was also overcast and gloomy. The period also coincided with the passage of *Ashoba* cyclone through the Arabian Sea which could have led to changes in the water currents and the increased wind velocity. We shared our observation and photographs (Figure 3) with Riley Pollom, Syngnathid Research Biologist and IUCN Red List Authority Coordinator in the Project Seahorse – Institute for the Oceans and Fisheries, The University of British Columbia. She confirmed the species as *Hippocampus kuda* and stated that it was not an usual phenomenon to find seahorses on beaches in live condition, but can be expected at times of unusual environmental conditions.

Seahorses have been reported from the coast of Maharashtra and Goa[7] as the

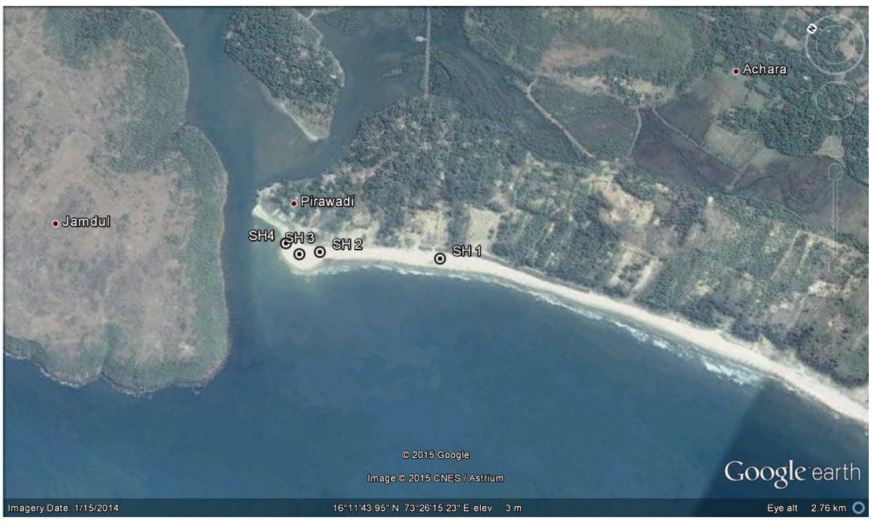

Figure 1. Google imagery showing locations of seahorses encountered on Achara beach.

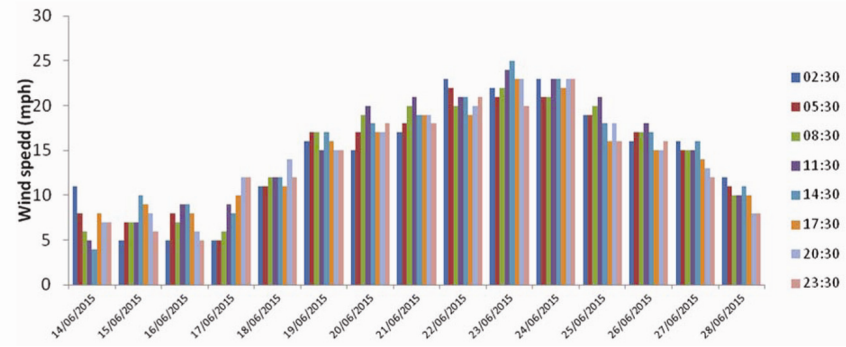

Figure 2. Wind speed in mph for a 24-hour period during 14 to 28 June 2015 (Source: www.worldweatheronline.com/malvan-weather-history/Maharashtra/IN.aspx).

Figure 3. Seahorses *Hippocampus kuda* on Achara beach, Maharashtra.

region has good amount of rocky outcrops, mangroves and corals that form the natural habitat for the sea horses[8]. However this is the first observational record of seahorses thrown by the sea waves onto sandy shore.

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An unusual diet of *Ichthyophis* caecilians (Amphibia: Gymnophiona)

Gymnophiona (caecilians) constitute one of the three extant orders of Lissamphibia, the other two orders being Anura (frogs and toads) and Caudata (newts and salamanders). The 207 nominate caecilian species[1] described to date under 10 families[2] are confined to certain tropical and subtropical regions of South America, Africa and Asia[3]. The habitat of most caecilians is moist and porous soil that is rich in humus and organic matter. Whereas members of the South American Typhlonectidae include aquatic and semiaquatic forms[3]. A detailed understanding of caecilian biology and behaviour has remained elusive because of their fossoriality[3]. The scanty account of their ecology is essentially based on incidental observations made on a small number of caecilians in the captive settings such as in laboratory or museum collections[4].

Caecilians are considered as generalist predators[5]. They feed primarily on soil ecosystem engineers: ants, termites and earthworms[6]. Occasionally they feed on dipteran larvae, centipedes, antlions, thrips and slugs[7] and very rarely on vertebrates such as scolecophidian snakes (*Schistometopum thomense*)[8], lizards (*Dermophis mexicanus*)[9], small fishes (*Chthonerpeton haydee*)[10] and frogs (*Chthonerpeton indistinctum*)[11]. The major reported predators of caecilians are snakes[3,12] with occasional records of carnivorous birds, fishes, turtles, frogs, dogs and aquatic mammals[6]. However, there are no reports of caecilians preying on other caecilians.