

and ~84 x 77cm CCL x CCW) and one small olive ridley turtle in addition to a few dead cow fish, trigger fish (2), and spotted sharp nosed puffer fish.

### Turtle symposium

To commemorate SSTCN completing 30 years of turtle conservation we conducted a symposium in October 2018. The symposium focused on children from fishing communities who are studying in Government schools along the coast, and >150 children from 10 schools participated. We had presentations on turtles, whales, sea birds, and coral reefs and their restoration by experts in their respective fields. An art session allowed the children to express and consolidate their understanding. Despite heavy rains all the children came to the first day of the symposium, but the second day was washed out and with it our planned interactions with senior fishers and other experts. Instead, a small group of interested students assembled at a volunteer's house and an energetic half-day discussion with Shravan took place about wildlife rescue and rehabilitation, along with a detailed talk about sea turtles and marine conservation with SSTCN members.

### Conclusion

In all, we had a great 2018 season despite the dead

turtles. It seemed to end all too quickly. Over the last decade, SSTCN volunteers have tended to stay on for many years, changing the former trend of an average of two or three years of volunteering. We now have many volunteers who have been with the group for more than 10 years. All of these people have chosen to work with animal care or nature conservation full time. This is a very heartening development. SSTCN always provided a platform for those interested in nature conservation to gain experience and deepen their interests. Now, SSTCN's role has changed and the group itself has begun to absorb these youngsters who are finding ways to commit to the turtle conservation work while finding other ways to engage further with other conservation work during the off-season and, sometimes, even during the season.

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## FIRST RECORD OF GREEN SEA TURTLE NESTING AT SHEEDVAR ISLAND, PERSIAN GULF, IRAN

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### INTRODUCTION

Some of the islands in the northern Persian Gulf are important nesting sites for hawksbill sea turtles (*Eretmochelys imbricata*) as well as major feeding grounds for green turtles (*Chelonia mydas*). More than a decade of research and surveys indicate that the main islands for nesting populations of hawksbill turtles are: Hendourabi, Hengam, Qeshm, and Sheedvar (Shidvar) Islands in Hormozgan Province in the centre of the Gulf, and Nakhiloo and Ommolkaram Islands in Bushehr Province

in the east (Mobaraki, 2004a,b; Zare *et al.*, 2012). At least 500 nesting hawksbill turtles have been tagged since 2005 (Mobaraki & Elmi, 2005; Mobaraki, 2010), and data collected on the clutch size, eggs, hatchlings and turtles (Mobaraki, 2004b). Tag returns have been recorded at Sheedvar *Is.* and other sites (Mobaraki, unpubl.). The nesting populations, based on annual visits, seems to be stable (Mobaraki, pers.obs.) and most of the nesting sites are under governmental protection.

In contrast to hawksbill turtles, of which only mature

females are observed at the islands and only during the nesting season from March-May, green turtles of different life stages may be found in the area year-round. There are few records of nesting green sea turtles in Iran, and it is difficult and time consuming to identify their nesting sites, especially on islands and long beaches. Records on green turtle nests from Hendourabi Is. (Mobaraki, 2010) are based on the easily distinguishable form of nest compared to hawksbill nests. The foraging populations of green sea turtles in Iran, or any species, are not well studied as access is difficult and there are needs for specific equipment and extra expenses. Subsequently, populations of foraging turtles are less well documented than nesting populations.

### STUDY SITE

Sheedvar Is. (53.24°N, 26.48°E) is located in the province of Hormozgan, about 2km off the eastern tip of Lavan Is. and about 9km off the mainland coast, in the central Persian Gulf; the island is 157km from Bandar-e Lengeh, the main administrative town in the northwest of Iran. The total area of the island is 97ha with a coastline of 5.5km. It is a small rocky island, roughly oblong in shape and relatively flat. Sheedvar Is. is a good example of a low-lying offshore island (maximum elevation of about 8m) with fringing coral reefs, characteristic of the Gulf. Although the island is uninhabited, it is widely used by fishers as a location for resting (Mobaraki 2004a,b).

As of 2012, the island was one of the most important nesting sites of sea turtles in Iran, and potentially for hawksbill turtles in the Persian Gulf. Nesting occurs on the eastern and northern beaches (Mobaraki, 2004a; Mobaraki & Elmi, 2005; Zare *et al.*, 2012). The offshore area is important as internesting habitat for hawksbills and feeding grounds for green turtles (Mobaraki, 2010). The entire island was designated by Iran as a Protected Area in July 1971 then upgraded to a Wildlife Refuge in 1972. Because of its significance as a nesting and resting site for migratory shore- and seabirds, supporting the largest known breeding colonies of terns in Iran including *Sterna repressa*, *S. anaethetus* and *S. bengalensis*, it was also designated as Iran's 20th international wetland of importance in 1999 (Scott 1995). Moreover, and most importantly for sea turtle conservation, Sheedvar Is. was accepted to the "Network of site of importance for marine turtles" by the IOSEA Memorandum of Understanding in 2014.

### OBSERVATIONS

After the March-May peak nesting season (Zare *et al.*, 2012) July is the peak hatching month for hawksbill turtle nests at Sheedvar Is. so its beaches are patrolled

from the early afternoon to locate emerging nests and hatchlings and collect data. By this time of the year, nesting of the hawksbill turtles has finished. However, in July 2014, a fresh track was detected. The track size and width indicated that it was not made by a hawksbill turtle. The tracks and body pits indicated that the turtle had not nested, so patrolling of the beach continued for another day. On 5<sup>th</sup> July 2014 at 2000hr, a green turtle was found trying to dig its body pit in the same location. Due to the dry sand, it changed location five times, finally nesting within 2m of the shore line (Mobaraki *et al.*, 2018). We waited until 0400hr the following day for it to lay eggs and finished the nesting process.

The curved carapace length (CCL; 139cm) and width (CCW; 125cm) were measured using a fiberglass tape measure. The clutch size was counted (61 eggs + 11 yolkless eggs) and a sample of 15 normal yolked eggs were measured (average diameter 43.44mm) and weighed (average weight 44.96g) using digital calipers and a balance with 0.01mm and 0.01g accuracy, respectively. The turtle was tagged with a flipper tag number 867, and the nest location was recorded using a GPS (see Mobaraki *et al.*, 2018). We were unable to monitor the nest to calculate hatching and emergence success.

### DISCUSSION

The sporadic nesting of green turtles at Sheedvar Is. (see also Mobaraki, 2010) may involve spillover of females from the nearby rookeries in Kuwait (Rees *et al.*, 2013; Al-Mohanna *et al.*, 2014), Oman (Mendonça *et al.*, 2010), Saudi Arabia (Miller, 1989; Pilcher & Al-Merghani, 1992; Al-Merghani *et al.*, 2000; Pilcher, 2000), or United Arab Emirates (EAD, 2016). As sea turtles are philopatric, sporadic nesting events may result in the formation of a new nesting population at Sheedvar Is., adding to its relevance as a significant sea turtle site in the Persian Gulf.

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### Editor's Note

The green sea turtle CCL (139cm) reported by Mobaraki *et al.* exceeds the mean previously reported for all other green turtle populations (see Hirth, 1997) and further data are required before assumptions can be made about the size of animals in this population.

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