


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Poster · February 2022
DOI: 10.13140/RG.2.2.12011.00109


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Nesting Activity and Conservation of marine Turtles in Three Nesting Sites West of Sirte (results of 2006-2007 seasons)

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Introduction:

Evidence on Loggerhead marine turtles nesting in Libya was reported since mid and late seventies (Shliech, 1977 Armsby, 1978).

During nineties three nation-wide coastal surveys were conducted to assess the nesting density (Laurent et al, 1995, 1998, Hadoud and Elgomati, 1997).

Since 2005 EGA has launched a national initiative for conservation and awareness on marine turtles, the Libyan Seaturtle Program, in collaboration with UNEP-MAP-RAC/SPA (Hamza & El ghmami, 2005) as a part of implementation of the MAP on marine turtles (RAC/SPA 2001).

Along the Libyan coastline (Fig.1), Several nesting sites is being identified and monitored for the full season to quantify their relative importance and to estimate the population size of marine turtles nesting in Libya.

This poster presents results of two years of protecting nests of loggerheads in Sirte, and compare results with 2005 findings.

Description of study Area:

Al Ghbeba Site : Located 20 km west of Sirte (31°13 098'N - 16°23 123'E and 31°13.427'N - 16°19.862'E). 5.03 km in length (Fig.2).

Al Thalateen Site: Located about 28 km (31°13 429'N - 16°19 860'E and 31°13.666'N - 16°19.473'E), it is separated from Al Gbeba site with 200m of rocky beach (called locally Gharnata beach). Beach length 5 km.

Al Arbaeen Site: located 35 km west of Sirte (31°15 195'N - 16°07 218'E and 31°14.012'N - 16°13.737'E). Beach length is 8.5 km,



Fig.1 Map of Libya shows the location of sites



Fig.2 Morning Patrols on Al Ghbeba Beach

Materials and Methods:

From the last week of May till the second week of September Al Ghbeba and Al Thalateen sites were patrolled daily by foot (Fig.2). Al Arbaeen was surveyed weekly. 2-3 researchers had carried out the patrols, Data were collected using a pre-prepared standardized forms.

Nest/ tracks were identified as NCT (Nesting track), N (old nest no track), FT (false track) and UT (return with no nesting attempt track).

Nests were relocated from Al Ghbeba and Al Thalateen, into fenced area "Hatchery", 15m away of seashore of Al Thalateen (Figs.3 and 4) to avoid minimize poaching and predation. Nests at Al Arbaeen left as *insitu* protection.



Fig.3 Hatchery management, Public awareness during the visit by RACSPA director and team of Mediterranean turtle experts in 2006



Fig.4 Nest relocation into egg chamber with similar dimensions

Results and Discussion:

Only loggerheads nesting was found at these sites, suggesting that Green turtles are unlikely to nest in this part of Libya (Laurent et al., 1998; Hamza & Elghmati, 2005) regardless the availability of habitats.

Nesting density was the highest in Al Ghbeba comparing to the other two sites (see the below graph), it's proved to be the most important nesting site in Libya so far with 8.8 nests/km in 2005 (Hamza & Elgmami, 2005), 39.4 nests/km in 2006 and 30.8 nests/km in 2007. In Al Thalateen 25% increase was also noticed in 2006, with a slight decrease in 2007. the situation is still needs more efforts at Al Arbaeen (Fig.5)

as the site is surveyed on weekly basis.

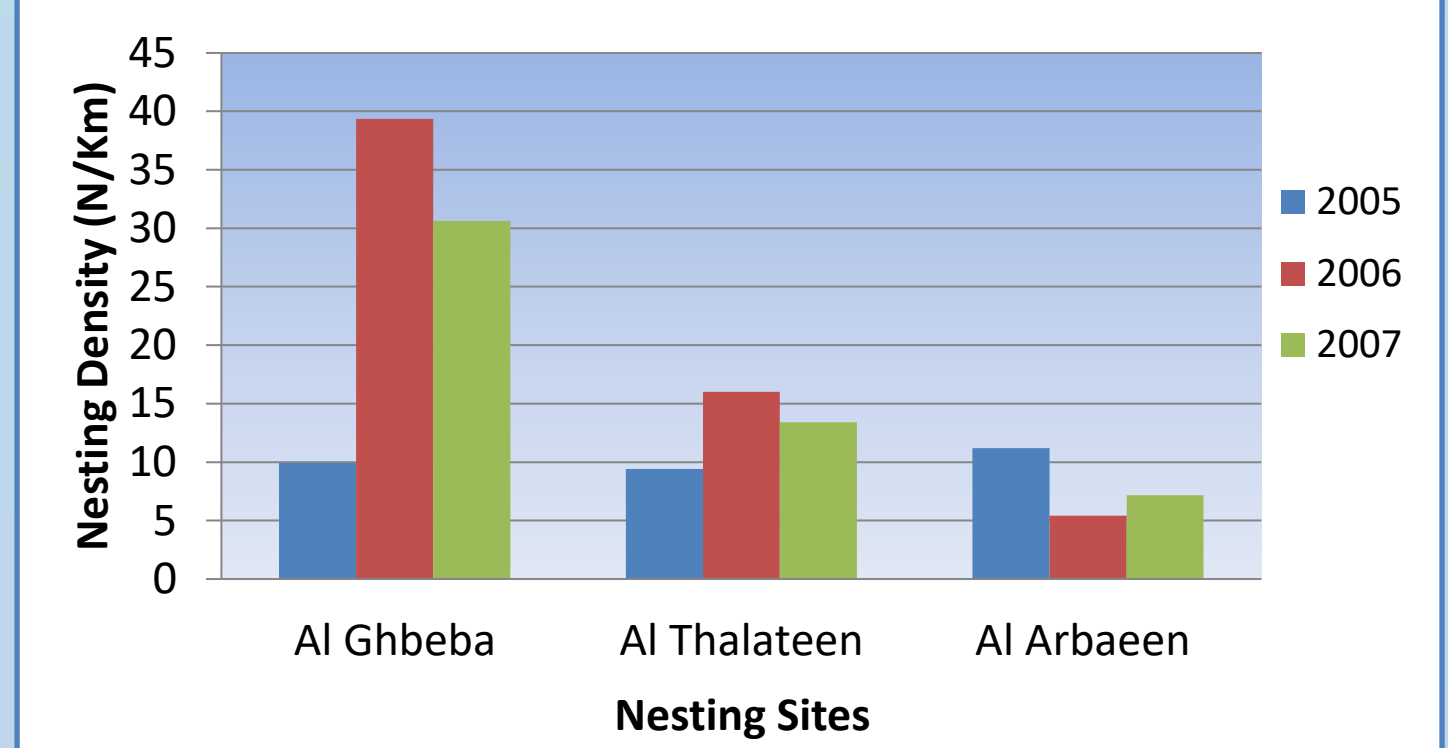
Predation was decreased markedly to less than 0.2% during the 2006-2007 seasons compared to 2005 season, when 29% predation by Fox or dogs were reported. Thanks to the conservation efforts (*insitu* and *exsitu*).

Poaching also decreased noticeably from 12.5% in 2005 to less than 1% in 2006-2007 seasons at the three sites.

Acknowledgements:

To EGA for financing this work for the third year.
To UNEP-MAP RAC/SPA for helping in 2006 campaign, and for the travel grant for the 3rd Med Conference that given us.
To Local Authorities in Sirte, especially the media sector.

Fig. 5 Comparison of nesting density during the last three seasons



Conclusions:

- * Al Ghbeba is one of the most important nesting site in Libya .
- * Protection of nests helped to save more eggs from poaching and predation.
- * There is a great need to work towards declaration of the three sites as marine protected areas for turtles.
- * Awareness should continue to educate local public, stakeholders and in particular fishermen and developers on how important their area is for the Mediterranean biodiversity.
- * More detailed studies should be carried out to investigate the genetic structure, population trends and other ecological issues.



Fig 6. LibSTP exhibition in 2006 showed the public & local stakeholders how important is their region for marine turtles (Left);

Awareness Materials produced by LibSTP (right).



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