

Project Update: July 2015

1. Research activities:

- 1.1. Intentional capture of black sea turtles in Bahía Salado, in order to collect biological samples (blood, skin and carapace) for stable isotope analysis (Figure 1-4). Fieldwork was carried out, from November 21st through November 30th (spring fieldwork), during which we had 3 captures. Furthermore, an additional fieldwork was performed in the summer of 2015, from January 29th through February 10th, during which we had 2 more captures. We have been performing fieldwork and turtle captures since late 2013. Considering both campaigns above mentioned, we completed a total of 7 captures with 7 subsequent recaptures.
- 1.2. Turtle's potential dietary items sampling, in order to perform stable isotope analysis and to determine the importance of *Zostera chilensis* in black turtle's diet. This task was performed during 2015 summer fieldwork, from January 29th through February 10th. We collected samples from species such as: *Zostera chilensis*, *Macrocystis pyrifera*, *Ulva* sp., *Asparagopsis armata*, *Chondrus canaliculatus*, among others (Figure 5).

2. Education and outreach:

2.1. Education

- Semi-structured surveys were performed to fishermen living in surrounding areas, summing up a total of 53 fishermen interviewed from 7 fishermen coves (Figure 6). Interviews were carried out during spring and summer fieldwork. The objective of these interviews was to determine if there is interaction between artisanal fisheries, and sea turtles in Bahía Salado and its surroundings. Another aim of these activities was to determine the level of knowledge about sea turtles, and their importance in marine environments by fishermen.
- Educational talks for children were carried out in two public elementary schools in Caldera, Villa Las Playas and Byron Gigoux James, each with 39 and 37 eight year old children, respectively. Talks were performed during the spring season of 2014. The developed activities were called "didactic classroom workshops". These, were carried out in two sessions, which consisted in an interactive oral presentation of contents, and a practical life-experience activity (Figure 7). Marine ecosystems, trophic networks, ecosystem services and local threats to marine wildlife, were the topics addressed in the first session. While, sea turtles' special features, life cycle, Chilean dwelling species identification and threats, were the topics addressed in the second session.
- Workshops for fishermen were carried out at two different fishermen unions, Caleta Totoral and Caleta de Caldera, where 5 and 21 fishermen attended, respectively. Workshops were performed during the spring season of 2014. These workshops were composed of a single training session, which

consisted in an interactive oral presentation of contents and a practical activity with a sea turtle puppet (Figure 8). The main topics reviewed in these workshops were Chilean dwelling sea turtle species identification, human interaction with sea turtles, main causes of sea turtle strandings and release of sea turtles from gillnets.

2.2. Outreach

- Local community discussion tables were performed in Totoral, the closest town to Bahía Salado. These activities were carried out during the spring season of 2014 and included the participation of twenty people (14 men and 6 local women; Figure 9).
- Results obtained from research, interviews and environmental education were exposed in the 35th annual symposium on sea turtle biology and conservation on April 18-24th in Dalaman, Turkey, and in the XXXV Chilean Congress of Marine Sciences on May 25-29th in La Serena, Chile (Figure 10).

3. Pictures



Figure 1. Photo-identification of black turtle individuals captured during spring and summer fieldwork



Figure 2. Blood sampling collection for stable isotopes analysis.



Figure 3. Skin sampling collection for stable isotopes analysis.



Figure 4. Carapace sampling collection for stable isotopes analysis.



Figure 5. Black turtle's potential dietary items sampling for stable isotopes analysis.



Figure 6. Semi-structured surveys to fishermen living in surrounding areas to Bahía Salado during spring and summer fieldwork.



Figure 7. Educational talks for children in two public elementary schools in Caldera, Atacama Region.



Figure 8. Workshop for fishermen in Caleta Totoral and Caldera, Atacama Region.



Figure 9. Discussion tables in Totoral, Atacama Region.



Figure 10. Presentation in the 35th annual symposium on sea turtle biology and conservation on April 18-24th in Dalaman, Turkey, and in the XXXV Chilean Congress of Marine Sciences on May 25-29th in La Serena, Chile