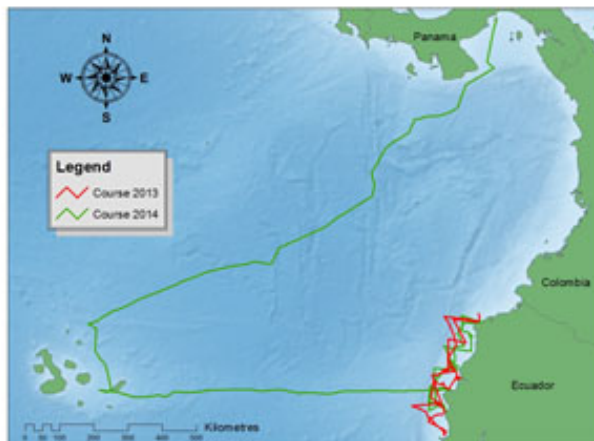


## Project Update: February 2015

Our research area extended from off the coast of Ecuador to the Galapagos Marine Reserve. We used two distinct research platforms: an outboard powered fiberglass vessel to survey the coast of Esmeraldas a sailboat for long distance surveys carried out on offshore waters. From end of June to July 2014 we sailed from Panama to Galapagos and Galapagos to Ecuador (photo.1). Meanwhile we surveyed the breeding area off Esmeraldas with a total of twenty trips in a fiberglass vessel.

Sound recordings, pictures of humpbacks, other cetacean species, and navigation vigilance were carried out during the 24 hours. On some occasions environmental conditions limited the acoustic monitoring from Galapagos and along the continental coast of Ecuador. However, all the time song recordings were registered at the Esmeraldas breeding ground (photo.2). The acoustic data of songs will be used to for an upcoming bachelor thesis and regional project at Pacific Southeast.

Photos description:



Route carried out 2014 (red colour). Panama- Galapagos-Manabi-Esmeraldas.  
Photo by Franciso Rubianes.



Research team and local assist during recording of humpback whale songs.  
Photo by Javier Oña.