The following supplement accompanies the article

Predictable temperature-regulated residency, movement and migration in a large, highly-mobile marine predator (*Negaprion brevirostris*)

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Supplement. Detection range test details showing design (Fig. S1) and results (Fig. S2). Also, presence/absence of all sharks detected on the core array for at least a total of 20 days (n = 56; Fig. S3), relative to the period each was available for potential detection

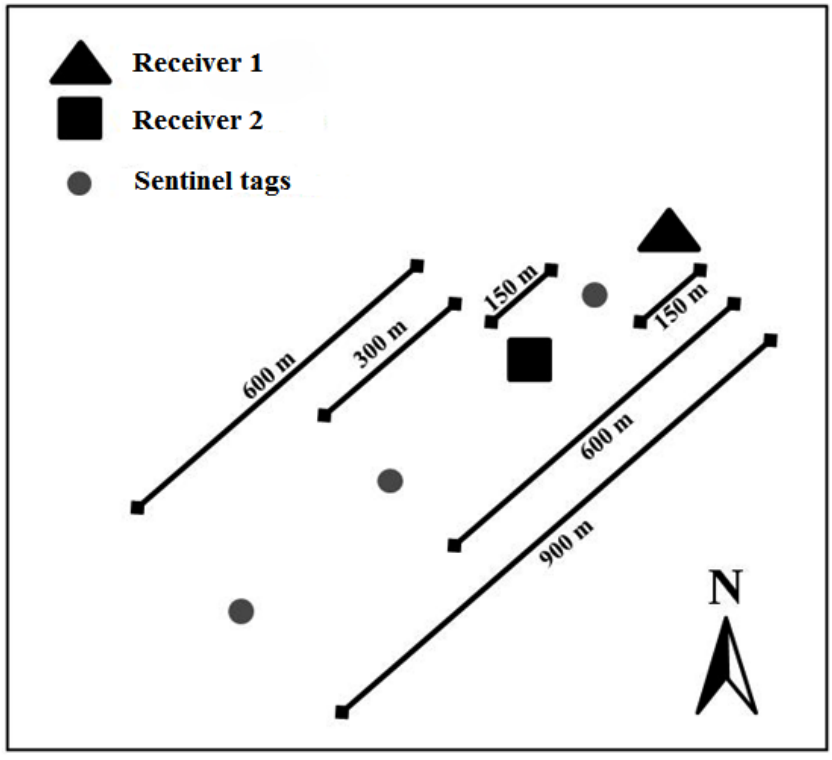

Fig. S1. Detection range test design showing the positions of sentinel transmitters relative to receiver sites. Lines represent distance intervals from sentinel transmitters to acoustic receiver, below for Receiver 1 and above for Receiver 2

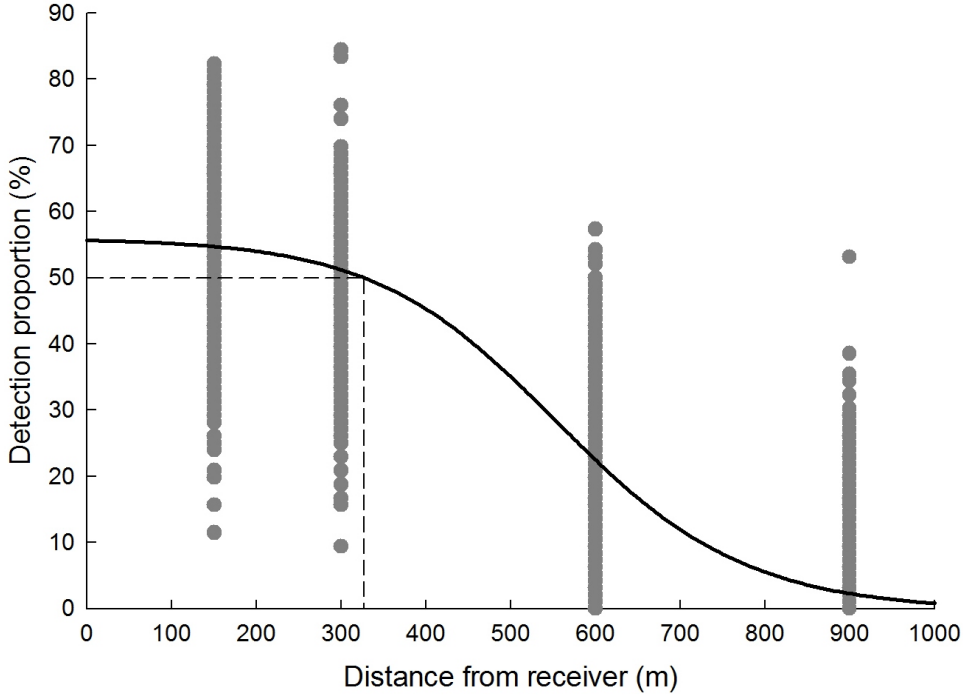

Fig. S2. Detection range test results from February 2009 to December 2011. Grey circles represent daily proportions of detections received, black line is a logistic regression through the data points, and the dashed lines represent 50% detection efficiency. A 50% detection efficiency has been adopted to represent effective detection range for this study, which translates to a detection range of 326 m

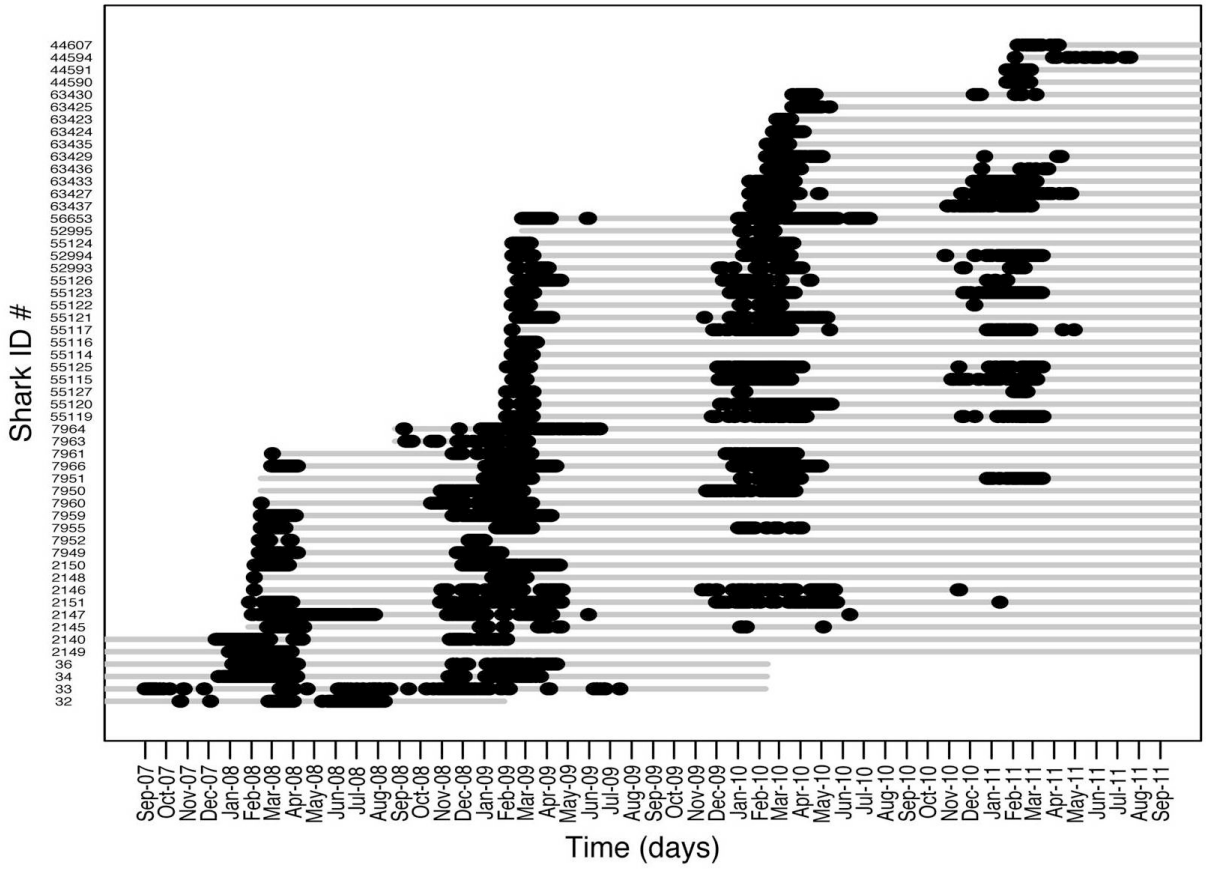

Fig. S3. Presence or absence of individual acoustically tagged lemon sharks in the study area from September 2007 to September 2011. Lemon sharks displayed were recorded for a minimum of 20 d (n = 56). Black dots represent presence, and grey lines represent the availability of the shark for detection based on tagging date and battery life. Sharks are ordered by date of tagging from bottom to top. The detection pattern shows a distinct residence period from December to April