**Supplementary Material**



Supplementary Figure S1. Scallop harvest area and protection areas within the study region.

Supplementary Table S1. Details on sighting transects. One continuous transect was performed each day, with parallel sighting of vessels and turtles.

|  |  |  |
| --- | --- | --- |
| ***Date*** | ***Number of******vessels sighted*** | ***Number of******turtles sighted*** |
| *Before Scallop Season* |  |  |
| 22-May-2016 | 106 | 4 |
| 30-May-2016 | 50 | 11 |
| 31-May-2016 | 8 | 18 |
| 8-Jun-2016 | 21 | 25 |
| 9-Jun-2016 | 21 | 36 |
| 15-Jun-2016 | 14 | 1 |
| 24-Jun-2016 | 34 | 9 |
| Mean (SD) | 36.3 (33.7) | 14.0 (12.4) |
|  |  |  |
| *During Scallop Season* |  |  |
| 25-Jun-2016 | 454 | 4 |
| 26-Jun-2016 | 489 | 1 |
| 27-Jul-2016 | 183 | 13 |
| 28-Jul-2016 | 78 | 4 |
| 2-Aug-2016 | 189 | 3 |
| 18-Aug-2016 | 141 | 24 |
| 26-Aug-2016 | 137 | 22 |
| 27-Aug-2016 | 463 | 19 |
| 11-Sep-2016 | 209 | 32 |
| 24-Sep-2016 | 258 | 5 |
| Mean (SD) | 260.1 (151.8) | 12.7 (10.9) |

Supplementary Table S2. Summary of tag deployment and performance.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Turtle ID*** |  | ***Flipper tag*** |  | ***Standard******SCL******(cm)*** |  |  |  | ***Satellite tracking*** |
| ***Releasing******site*** | ***Argos******ID*** | ***First uplink*** | ***Last uplink*** |  | ***Total******tracking days******(filtered)*** |  | ***Number of fixes (unfiltered)*** |  | ***Number of fixes******(filtered)*** |
|  |  |  |  |  | *bef* | *dur* |  | *bef* | *dur* |  | *bef* | *dur* |
| *Green turtles* |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Cm\_1 |   | NNQ848 |  | 60.2 | CNWR |  | 142708 | 01-Jun-2016 | 02-Aug-2016 |   | 62 |   | 1153 |   | 84 |
|  |  |  |  |  |  |  |  |  |  |  |  | 24 | 38 |  | 511 | 642 |  | 41 | 43 |
|  | Cm\_2 |  | LLP018 |  | 33.4 | SMMAP |  | 159776 | 02-Jun-2016 | 03-Aug-2016 |  | 62 |  | 600 |  | 79 |
|   |  |  |  |  |  |  |  |  |  |  |  | 23 | 39 |  | 247 | 353 |  | 33 | 46 |
| *Kemp’s ridley turtles* |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Lk\_1 |  | LLP117 |  | 31.8 | SMMAP |  | 159779 | 01-Jun-2016 | 12-Jul-2016 |  | 41 |  | 859 |  | 217 |
|  |  |  |  |  |  |  |  |  |  |  |  | 24 | 17 |  | 515 | 344 |  | 158 | 59 |
| *Loggerhead turtles* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Cc\_1 |  | NNQ840 |  | 71.3 | CNWR |  | 128354 | 04-Jun-2016 | 04-Sep-2016 |  | 92 |  | 1990 |  | 108 |
|  |  |  |  |  |  |  |  |  |  |  |  | 21 | 71 |  | 314 | 1465 |  | 26 | 77 |
|  | SMMAP = St. Martins Marsh Aquatic Preserve |
|  | CNWR = Chassahowitzka National Wildlife Refuge |









Supplementary Figure S2. Temporal distribution of filtered satellite-derived fixes for each tracked turtle.