





Appendix A-2 - Cetacean and Sea Turtle Information

| Sighting Number | Date      | Time (Local) | Latitude | Longitude   | Effort | Group Size | Species                           | Movement | Direction | Distance (m) | Bowride | Reaction | Attitude | Approach | Run | Split | School Behavior | Change in School Behavior | What School Behavior | School Shape | Change in School Shape | What School Shape | Photos |
|-----------------|-----------|--------------|----------|-------------|--------|------------|-----------------------------------|----------|-----------|--------------|---------|----------|----------|----------|-----|-------|-----------------|---------------------------|----------------------|--------------|------------------------|-------------------|--------|
| 112             | 3/17/2007 | 906          | 11.79833 | 143.7218333 | 1      | 7          | <i>Psuedorca crassidens</i>       | 2        | 250       | 0            | 1       | 2        | 2        | 1        | 2   | 1     | 2               | 1                         | 6                    | 3            | 1                      | 1                 | 1      |
| 113             | 3/17/2007 | 1653         | 10.99833 | 142.7961667 | 1      | 1          | <i>Physeter macrocephalus</i>     | 2        | 300       | 1770         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 114             | 3/17/2007 | 1739         | 10.91833 | 142.7035    | 1      | 4          | Unid small delphinid              | 5        | 270       | 560          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 115             | 3/18/2007 | 842          | 10.56783 | 142.478     | 1      | 6          | <i>Physeter macrocephalus</i>     | 2        | 0         | 2800         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 116             | 3/18/2007 | 905          | 10.5505  | 142.4223333 | 1      | 25         | <i>Stenella attenuata</i>         | 4        | 190       | 0            | 1       | 1        | 2        | 1        | 2   | 2     | 6               | 1                         | 7                    | 1            | 2                      |                   | 1      |
| 117             | 3/18/2007 | 947          | 10.4815  | 142.3688333 | 1      | 8          | <i>Physeter macrocephalus</i>     |          |           |              | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 1      |
| 118             | 3/18/2007 | 1005         | 10.45667 | 142.351     | 2      | 20         | <i>Stenella attenuata</i>         | 3        | 270       | 150          | 2       | 2        | 3        | 2        | 2   | 2     | 2               | 2                         |                      | 1            | 2                      |                   | 2      |
| 119             | 3/18/2007 | 1051         | 10.3645  | 142.2688333 | 2      | 1          | <i>Balaenoptera edeni</i>         |          |           | 200          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 120             | 3/18/2007 | 1220         | 10.24133 | 142.1635    | 1      | 1          | <i>Physeter macrocephalus</i>     |          |           | 6800         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 121             | 3/18/2007 | 1247         | 10.1845  | 142.1208333 | 1      | 9          | <i>Stenella attenuata</i>         | 5        | 270       | 1000         | 2       | 2        | 1        | 2        | 2   | 2     | 2               |                           |                      | 2            | 2                      |                   | 2      |
| 122             | 3/18/2007 | 1443         | 10.184   | 142.02      | 1      | 1          | <i>B. edeni/borealis</i>          |          |           |              | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 123             | 3/18/2007 | 1507         | 10.2465  | 142.014     | 1      | 1          | Unid. Rorqual                     |          |           |              | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 124             | 3/18/2007 | 1542         | 10.31317 | 142.0278333 | 1      | 2          | <i>Balaenoptera edeni</i>         |          |           | 40           | 2       | 2        | 1        | 2        | 1   |       |                 |                           |                      |              |                        |                   | 1      |
| 125             | 3/18/2007 | 1650         | 10.38983 | 142.0966667 | 2      | 2          | <i>Physeter macrocephalus</i>     |          |           | 920          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 126             | 3/18/2007 | 1730         | 10.42617 | 142.1113333 | 1      | 11.88      | <i>Tursiops truncatus</i>         |          |           | 0            | 1       | 1        | 2        | 1        | 2   | 2     | 4               | 1                         | 7                    |              |                        |                   | 1      |
| 126             | 3/18/2007 | 1730         | 10.42617 | 142.1113333 | 1      | 24.12      | <i>Physeter macrocephalus</i>     |          |           | 80           | 2       | 1        | 2        | 1        | 2   | 2     |                 |                           |                      |              |                        |                   | 1      |
| 127             | 3/20/2007 | 817          | 13.61517 | 145.0843333 | 1      | 7          | <i>Globicephala macrorhynchus</i> | 3        | 180       | 50           | 2       | 2        | 3        | 2        | 2   | 2     | 3               | 2                         |                      | 3            | 2                      |                   | 1      |
| 128             | 3/20/2007 | 1719         | 12.36833 | 144.3223333 | 1      | 6          | <i>Feresa attenuata</i>           |          |           | 150          | 2       | 2        | 3        | 1        | 2   | 1     | 4               | 1                         | 3                    | 1            | 2                      |                   | 2      |
| 129             | 3/25/2007 | 1803         | 16.71283 | 147.7433333 | 1      | 3          | Unid small delphinid              | 5        | 90        | 4400         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 130             | 3/26/2007 | 631          | 16.8215  | 147.678     | 1      | 3          | <i>Physeter macrocephalus</i>     |          |           | 1100         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 131             | 3/26/2007 | 1302         | 17.591   | 146.9356667 | 1      | 1          | Unid. Rorqual                     |          |           | 4150         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 132             | 3/27/2007 | 1318         | 17.04833 | 145.5505    | 1      | 1          | <i>Balaenoptera edeni</i>         |          |           | 400          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 133             | 3/28/2007 | 1646         | 17.75933 | 143.7488333 | 1      | 9          | <i>Globicephala macrorhynchus</i> | 3        | 60        | 50           | 2       | 3        | 3        | 2        | 2   | 2     | 3               | 2                         |                      | 3            | 2                      |                   | 1      |
| 134             | 3/29/2007 | 816          | 17.75217 | 143.26      | 1      | 7          | <i>Globicephala macrorhynchus</i> | 5        | 35        | 1050         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 135             | 3/30/2007 | 1358         | 16.01733 | 142.9718333 | 1      | 1          | Unid large whale                  |          |           | 5800         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 136             | 3/30/2007 | 1639         | 15.84283 | 143.264     | 1      | 2          | <i>Balaenoptera edeni</i>         | 4        | 240       | 100          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 1      |
| 137             | 3/31/2007 | 1237         | 15.59933 | 146.058     | 1      | 14         | <i>Physeter macrocephalus</i>     | 3        | 100       | 200          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 1      |
| 138             | 4/2/2007  | 833          | 16.1745  | 146.2866667 | 1      | 20         | <i>Stenella attenuata</i>         | 6        | 260       | 400          | 2       | 2        | 3        | 2        | 2   | 2     | 2               | 2                         | 1                    | 1            | 2                      | 2                 | 2      |
| 139             | 4/8/2007  | 724          | 14.0965  | 145.7533333 | 1      | 36         | <i>Stenella attenuata</i>         | 6        | 0         | 200          | 2       | 1        | 1        | 2        | 1   | 2     | 1               | 1                         | 1                    | 1            | 2                      |                   | 1      |
| 140             | 4/8/2007  | 950          | 13.989   | 146.0538333 | 1      | 1          | Unid. Rorqual                     |          |           | 3930         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 141             | 4/8/2007  | 1206         | 13.89817 | 146.3416667 | 1      | 3          | Unid. Rorqual                     |          |           | 2820         | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 2      |
| 142             | 4/8/2007  | 1444         | 13.85233 | 146.6488333 | 1      | 3          | <i>Balaenoptera edeni</i>         |          |           | 20           | 2       |          | 4        | 1        | 2   |       |                 |                           |                      |              |                        |                   | 1      |
| 143             | 4/9/2007  | 1342         | 14.42617 | 147.1       | 1      | 2          | <i>Balaenoptera borealis</i>      |          |           | 350          | 2       | 3        | 4        | 1        | 2   | 2     | 3               | 2                         |                      |              |                        |                   | 1      |
| 144             | 4/10/2007 | 1113         | 14.38983 | 145.8985    | 1      | 1          | <i>Physeter macrocephalus</i>     |          |           | 500          | 2       |          |          |          |     |       |                 |                           |                      |              |                        |                   | 1      |
| 145             | 4/10/2007 | 1123         | 14.3845  | 145.8748333 | 2      | 5          | <i>Peponocephala/Feresa</i>       | 6        | 160       | 1470         | 2       | 3        | 5        | 2        | 3   | 3     | 8               | 3                         |                      | 3            | 2                      |                   | 2      |
| 146             | 4/10/2007 | 1518         | 13.94367 | 145.4451667 | 1      | 10         | Unid small delphinid              | 4        | 330       | 3300         | 2       | 3        | 5        | 2        | 3   | 3     | 2               | 1                         | 9                    | 5            | 3                      |                   | 2      |

**Legend**

Effort: 1 = on-effort; 2 = off-effort

Movement: 1 = fast travel; 2 = moderate travel; 3 = slow travel; 4 = milling; 5 = associated swimming; 6 = approaching; 7 = bow riding; 8 = unknown; 9 = other

Direction: Relative to the travel of the ship

Bowride: 1 = yes; 2 = no

Reaction (to the vessel): 1 = yes; 2 = no; 3 = unknown/cannot be determined; 4 = other; 5 = ?

Attitude (in relation to the vessel): 1 = evasive; 2 = non-evasive - attracted; 3 = non-evasive - indifferent; 4 = both; 5 = cannot be determined; 6 = other

Approach (did the animal approach the vessel): 1 = yes; 2 = no; 3 = unknown/cannot be determined

Run (did the animal swim away from the vessel): 1 = yes; 2 = no; 3 = unknown/cannot be determined

Split (if group, did the group split): 1 = yes; 2 = no; 3 = unknown/cannot be determined

School Behavior: 1 = fast travel; 2 = moderate travel; 3 = slow travel; 4 = milling; 5 = associated swimming; 6 = approaching; 7 = bow riding; 8 = unknown; 9 = other

Change in School Behavior: 1 = yes; 2 = no; 3 = unknown/cannot be determined

What was the Change in School Behavior: 1 = fast travel; 2 = moderate travel; 3 = slow travel; 4 = milling; 5 = associated swimming; 6 = approaching; 7 = bow riding; 8 = unknown; 9 = other

School Shape: 1 = tight and uniform; 2 = tight and clumped; 3 = loose and uniform; 4 = loose and clumped; 5 = unknown; 6 = other

Change in School Shape: 1 = yes; 2 = no; 3 = unknown/cannot be determined

What was the Change in School Shape: 1 = tight and uniform; 2 = tight and clumped; 3 = loose and uniform; 4 = loose and clumped; 5 = unknown; 6 = other

Photos: 1 = yes, photos taken; 2 = no, photos not taken

Calves: 1 = yes; 2 = no; 3 = unknown/cannot be determined



## Appendix A-2 - Cetacean and Sea Turtle Information

| Sighting Number | Calves 1 | # Calves 1 | % Calves 1 | Group Size 1 | Species 2 | Calves 2 | # Calves 2 | % Calves 2 | Group Size 2 | Species 3 | Calves 3 | # Calves 3 | % Calves 3 | Group Size 3 | Comments  |
|-----------------|----------|------------|------------|--------------|-----------|----------|------------|------------|--------------|-----------|----------|------------|------------|--------------|---|
| 59              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 60              | 1        | 2          |            |              |           |          |            |            |              |           |          |            |            |              | at least 2 cow/calf pairs in the group  |
| 61              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 62              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | aerial activity, porpoising - running from boat at about 5400m                                |
| 63              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 64              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 65              |          |            |            |              |           |          |            |            |              |           |          |            |            |              | deleted record  |
| 66              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | milling, foraging? Checking out array, animals approached boat a 2600m                        |
| 67              | 1        | 1          |            |              |           |          |            |            |              |           |          |            |            |              | cow/calf pair small calf. Swimming in calf position.  |
| 68              | 1        |            | 18         |              |           |          |            |            |              |           |          |            |            |              |   |
| 68              |          |            |            |              | 73        | 2        |            |            |              |           |          |            |            |              |   |
| 69              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 70              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | reaction strongest at 1360m began running at ~4000m   |
| 71              | 1        | 1          |            |              |           |          |            |            |              |           |          |            |            |              | this is the group which had the animal that rammed us. See notes and sighting sheet.          |
| 72              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 73              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 74              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 75              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 76              | 1        | 1          |            |              |           |          |            |            |              |           |          |            |            |              | very small calf   |
| 77              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 78              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming 1000m, run from boat 400m, split 400m - 400m strongest response                  |
| 79              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 80              | 1        |            | 1          |              |           |          |            |            |              |           |          |            |            |              | strongest reaction 400m, run from boat at 100m, low swimming 300m                             |
| 81              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming 1500m, run from boat at 300m; milling moderate travel                            |
| 82              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 83              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | ran from boat at 920m   |
| 84              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 85              | 1        |            | 5          |              |           |          |            |            |              |           |          |            |            |              | animals porpoising, leaping reacted to ship at 1400m - low swimming not sure if due to vessel |
| 86              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | animals appeared to be feeding by skimming the surface.                                       |
| 87              | 1        | 1          |            |              |           |          |            |            |              |           |          |            |            |              | cow/calf pair   |
| 88              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 89              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 90              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | animals seen outside Apra Harbor on our way into port.  |
| 91              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 92              | 1        | 2          |            |              |           |          |            |            |              |           |          |            |            |              | animals seen 2 miles from shore   |
| 93              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 94              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | light evasion, ran from boat at 1600m slow, fast at 760m                                      |
| 95              | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | ran from boat at 200m; school split at 1000m  |
| 96              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | evasive movement at ~2600m  |
| 97              | 1        |            | 2          |              |           |          |            |            |              |           |          |            |            |              | animals approached the boat at ret. 8   |
| 98              | 1        |            | 10         |              |           |          |            |            |              |           |          |            |            |              |   |
| 99              | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 100             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming 4660m  |
| 101             | 1        |            | 5          |              |           |          |            |            |              |           |          |            |            |              | milling, assoc. swimming, approach, strongest reaction 300m                                   |
| 102             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | animals within 100m of each other began approaching boat at ~500m                             |
| 102             |          |            |            |              | 73        | 2        |            |            |              |           |          |            |            |              | animals within 100m of each other began approaching boat at ~500m                             |
| 103             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 104             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | large whale shark with associated tuna breezer  |
| 104             |          |            |            |              | 99        | 2        |            |            |              |           |          |            |            |              | large whale shark with associated tuna breezer  |
| 105             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 106             | 2        |            | 3          |              |           |          |            |            |              |           |          |            |            |              |   |
| 106             |          |            |            |              | 70        | 2        |            |            |              |           |          |            |            |              |   |
| 107             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 108             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 109             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | animals approached boat at 200m and were also low swimming, milling slow travel               |
| 110             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | behavior change to slow travel moderate travel milling and approaching at 300m split 100m     |
| 111             | 1        |            | 5          |              |           |          |            |            |              |           |          |            |            |              |   |
| 111             |          |            |            |              | 15        | 1        |            | 35         |              |           |          |            |            |              | steno split at 300m, group approached at 5.2 ret, pilot and bottlenose stayed together.       |
| 111             |          |            |            |              |           |          |            |            |              | 18        | 2        |            |            |              |   |

## Appendix A-2 - Cetacean and Sea Turtle Information

| Sighting Number | Calves 1 | # Calves 1 | % Calves 1 | Group Size 1 | Species 2 | Calves 2 | # Calves 2 | % Calves 2 | Group Size 2 | Species 3 | Calves 3 | # Calves 3 | % Calves 3 | Group Size 3 | Comments  |
|-----------------|----------|------------|------------|--------------|-----------|----------|------------|------------|--------------|-----------|----------|------------|------------|--------------|---|
| 112             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | animals rode bow and approached boat a 300m, low swimming .8ret                                   |
| 113             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 114             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 115             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 116             | 1        |            | 80         |              |           |          |            |            |              |           |          |            |            |              | approached boat at 1100m  |
| 117             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 118             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming at300m   |
| 119             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 120             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 121             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming  |
| 122             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 123             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 124             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming underwater blowing near ship (80m)   |
| 125             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 126             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 126             | 1        | 3          |            |              |           |          |            |            |              |           |          |            |            |              | both of these groups exhibited spyhopping, breaching and were closely associated- very calm       |
| 127             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 128             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | approach 200m briefly, low swimming 200m  |
| 129             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 130             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 131             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 132             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 133             | 1        |            | 10         |              |           |          |            |            |              |           |          |            |            |              | milling seemed preoccupied with something other than the ship                                     |
| 134             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 135             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 136             | 1        | 1          |            |              |           |          |            |            |              |           |          |            |            |              | cow/calf  |
| 137             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 138             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | rough seas and we were not able to continue working the animals                                   |
| 139             | 1        |            | 1          |              |           |          |            |            |              |           |          |            |            |              | low swimming animals  |
| 140             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 141             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 142             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              | 3 or 4 animals, lots of underwater blows, mixed characteristics, Sei/bryde's, interested in array |
| 143             | 1        | 1          |            |              |           |          |            |            |              |           |          |            |            |              | possible cow/calf pair - maybe 3 animals - see sighting sheet for additional comments             |
| 144             | 2        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 145             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              |   |
| 146             | 3        |            |            |              |           |          |            |            |              |           |          |            |            |              | low swimming at 3570m   |