

Table S1. Survey metadata for exposed rocky intertidal locations with sampling protocol, effort, number of samples, approximate total area sampled, and species richness. Number of samples for walk-about surveys is the sum of 10x10cm quadrats. Sampled area for walk-about surveys estimated with polygons bounded by sample points.

| 2004 Line Transect Survey |            |                                |               |             |
|---------------------------|------------|--------------------------------|---------------|-------------|
| Survey Site               | Effort (h) | Transect Length (m)            | No. Transects | No. Species |
| Sea Point                 | 5          | 230                            | 3             | 25          |
| Bailey Island             | 4          | 61                             | 3             | 22          |
| Pemaquid Point            | 4          | 75                             | 3             | 30          |
| Marshall Point            | 4          | 31                             | 3             | 24          |
| Petit Manan Point         | 4          | 64                             | 3             | 26          |
| Red Head                  | 4          | 65                             | 3             | 30          |
| Roque Bluffs              | 4          | 39                             | 3             | 29          |
| West Quoddy Head          | 4          | 61                             | 3             | 21          |
| 2007 Walk-about Survey    |            |                                |               |             |
| Survey Site               | Effort (h) | Sampled Area (m <sup>2</sup> ) | No. Samples   | No. Species |
| Sea Point                 | 12         | 1825                           | 125           | 71          |
| Bailey Island             | 8          | 1310                           | 86            | 47          |
| Pemaquid Point            | 8          | 566                            | 76            | 44          |
| Schoodic Point            | 12         | 5106                           | 132           | 39          |
| Red Head                  | 8          | 1404                           | 111           | 41          |
| West Quoddy Head          | 12         | 3336                           | 108           | 42          |
| 2012 Walk-about Survey    |            |                                |               |             |
| Survey Site               | Effort (h) | Sampled Area (m <sup>2</sup> ) | No. Samples   | No. Species |
| Sea Point                 | 5          | 1177                           | 66            | 54          |
| Biddeford Pool            | 4          | 1141                           | 53            | 58          |
| Bailey Island             | 7          | 1158                           | 56            | 57          |
| Bald Head                 | 5          | 1264                           | 63            | 59          |
| Pemaquid Point            | 4          | 916                            | 53            | 58          |
| Marshall Point            | 5          | 1275                           | 63            | 68          |
| Schoodic Point            | 5          | 1246                           | 44            | 49          |
| Petit Manan Point         | 3          | 1534                           | 43            | 48          |
| Red Head                  | 2          | 1100                           | 30            | 35          |
| Black Point               | 3          | 1721                           | 32            | 36          |
| West Quoddy Head          | 3          | 1274                           | 56            | 61          |

Table S2. Rocky intertidal species present among surveyed GoM exposed headlands. Abbreviations: BIsl, Bailey Island; BHd, Bald Head; BP, Biddeford Pool; BPt, Black Point; MPt, Marshall Point; PPt, Pemaquid Point; ScPt, Schoodic Point; SPt, Sea Point; PMPt, Petit Manan Point; RHd, Red Head; RoBI, Roque Bluffs; WQ, West Quoddy Head.

|                                 | 2004 |      |     |     |      |     |      |    | 2007 |      |     |      |     |    |     |    | 2012 |     |     |     |      |      |     |     |    |
|---------------------------------|------|------|-----|-----|------|-----|------|----|------|------|-----|------|-----|----|-----|----|------|-----|-----|-----|------|------|-----|-----|----|
|                                 | SPt  | BIsl | PPt | MPt | PMPt | RHd | RoBI | WQ | SPt  | BIsl | PPt | ScPt | RHd | WQ | SPt | BP | BIsl | BHd | PPt | MPt | ScPt | PMPt | RHd | BPt | WQ |
| <b>PORIFERA</b>                 |      |      |     |     |      |     |      |    |      |      |     |      |     |    |     |    |      |     |     |     |      |      |     |     |    |
| <i>Clathria prolifera</i>       | —    | —    | —   | —   | —    | —   | —    | —  | +    | —    | —   | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Halichondria panicea</i>     | —    | +    | +   | +   | —    | —   | —    | —  | +    | +    | +   | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | —    | +   | +   | +  |
| <i>Halisarca sp.</i>            | +    | —    | +   | +   | —    | —   | —    | —  | +    | +    | +   | +    | —   | —  | +   | +  | +    | +   | +   | +   | +    | —    | —   | —   | —  |
| <i>Haliclona oculata</i>        | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | —  | +   | +  | —    | +   | —   | +   | +    | —    | +   | —   | +  |
| <i>Leucosolenia botryloides</i> | +    | +    | +   | +   | —    | +   | +    | —  | +    | +    | +   | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   | +  |
| <i>Sycon ciliatum</i>           | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | +    | +   | +  | —   | —  | +    | —   | +   | +   | +    | —    | —   | —   | +  |
| <b>CNIDARIA</b>                 |      |      |     |     |      |     |      |    |      |      |     |      |     |    |     |    |      |     |     |     |      |      |     |     |    |
| <i>Aulactinia stella</i>        | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | +  | +   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Laomedea flexuosa</i>        | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | —  | —   | —  | —    | —   | +   | —   | +    | —    | —   | —   | —  |
| <i>Pachycerianthus borealis</i> | +    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Clava multicornis</i>        | —    | —    | —   | —   | —    | —   | —    | —  | +    | —    | +   | —    | —   | —  | +   | +  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Dynamena pumila</i>          | —    | —    | —   | —   | —    | —   | —    | —  | +    | +    | +   | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   |    |
| <i>Podocoryna carnea</i>        | —    | —    | —   | —   | —    | —   | —    | —  | —    | +    | —   | +    | —   | —  | +   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Lafoea dumosa</i>            | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | —  | —   | +  | —    | —   | +   | +   | —    | +    | —   | —   | —  |
| <i>Metridium senile</i>         | —    | —    | —   | —   | +    | +   | +    | +  | +    | +    | +   | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   |    |
| <i>Obelia geniculata</i>        | +    | +    | +   | +   | —    | +   | —    | +  | +    | +    | +   | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | —   | +   |    |
| <i>Obelia longissima</i>        | —    | —    | —   | —   | —    | —   | —    | —  | +    | —    | —   | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Dynamena pumila</i>          | +    | +    | +   | +   | +    | +   | +    | +  | —    | —    | —   | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Ectopleura crocea</i>        | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | +   | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Tubularia indivisa</i>       | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | —  | —   | —  | +    | —   | +   | +   | —    | —    | —   | —   | —  |
| <i>Urticina felina</i>          | —    | —    | —   | —   | +    | +   | +    | +  | —    | —    | —   | —    | —   | —  | +   | —  | —    | —   | —   | —   | —    | —    | +   | —   | +  |

|                           | 2004 |      |     |     |      |     |      |    | 2007 |      |     |      |     |    |     |    | 2012 |     |     |     |      |      |     |     |    |
|---------------------------|------|------|-----|-----|------|-----|------|----|------|------|-----|------|-----|----|-----|----|------|-----|-----|-----|------|------|-----|-----|----|
|                           | SPt  | BIsl | PPt | MPt | PMPt | RHd | RoBI | WQ | SPt  | BIsl | PPt | ScPt | RHd | WQ | SPt | BP | BIsl | BHd | PPt | MPt | ScPt | PMPt | RHd | BPt | WQ |
| <b>PLATYHELMINTHES</b>    |      |      |     |     |      |     |      |    |      |      |     |      |     |    |     |    |      |     |     |     |      |      |     |     |    |
| <i>Notoplana atomata</i>  | —    | —    | —   | —   | —    | —   | —    | —  | +    | —    | —   | —    | —   | +  | +   | —  | +    | —   | —   | +   | —    | +    | —   | —   | —  |
| <i>Plagiostomum album</i> | —    | —    | —   | —   | —    | —   | —    | —  | —    | —    | —   | —    | —   | —  | —   | —  | —    | —   | +   | —   | +    | —    | —   | +   | +  |

**NEMERTEA**

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <i>Amphiporus angulus</i>      | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | + |   |
| <i>Cerebratulus lacteus</i>    | — | — | + | + | + | + | — | + | + | + | + | + | + | — | — | + | — | — | — | — | + | — | — | + |
| <i>Lineus sanguineus</i>       | — | — | — | + | + | + | + | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Lineus ruber</i>            | — | — | + | + | + | + | + | — | + | + | — | + | + | — | + | + | — | — | — | — | — | — | — | + |
| <i>Lineus viridis</i>          | — | — | + | + | + | + | + | — | + | + | + | + | — | + | — | + | + | — | — | — | + | + | — | + |
| <b>Nematoda</b>                | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | + | + | — | — | — | — | — |
| <b>ANNELIDA</b>                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <i>Clitellio arenarius</i>     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | + | + | — | + | + | — | + |
| <i>Harmothoe imbricata</i>     | — | — | — | — | — | + | — | — | + | + | + | — | — | — | + | — | — | + | — | + | + | + | + | + |
| <i>Lepidonotus squamatus</i>   | — | — | + | — | — | — | — | — | + | + | + | — | — | + | + | + | + | + | + | — | — | — | — | + |
| <i>Myxicola infundibulum</i>   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | + | — | — | + |
| <i>Nereis pelagica</i>         | — | — | — | — | — | — | — | — | + | + | + | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Pectinaria gouldii</i>      | + | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Spirorbis spirorbis</i>     | — | — | + | — | — | + | — | — | + | — | — | — | + | + | + | — | + | — | — | + | + | + | + | — |
| <i>Circeis spirillum</i>       | + | + | — | — | — | + | — | — | + | + | + | — | + | — | — | + | + | + | + | + | + | + | + | + |
| <b>ARTHROPODA</b>              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <i>Balanus balanus</i>         | + | + | + | + | + | + | + | — | + | + | + | + | + | — | + | + | + | + | + | + | + | + | — | + |
| <i>Balanus crenatus</i>        | — | — | — | — | — | — | — | — | — | + | — | + | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Cancer borealis</i>         | — | — | + | — | — | — | — | — | + | — | + | — | + | — | + | — | + | + | + | + | + | + | + | — |
| <i>Cancer irroratus</i>        | — | + | + | — | — | — | — | — | + | + | + | — | + | — | + | + | — | + | + | + | + | + | — | + |
| <i>Caprella penantis</i>       | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | — | — | — | — | — | — |
| <i>Carcinus maenas</i>         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <i>Diastylis quadrispinosa</i> | — | — | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Gammarus oceanicus</i>      | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | + | + | + | + | + | — |
| <i>Gammarus mucronatus</i>     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | + | + |

2004

2007

2012

|                                | SPt | BIsl | PPt | MPt | PMPt | RHd | RoBl | WQ | SPt | BIsl | PPt | ScPt | RHd | WQ | SPt | BP | BIsl | BHd | PPt | MPt | ScPt | PMPt | RHd | BPt | WQ |
|--------------------------------|-----|------|-----|-----|------|-----|------|----|-----|------|-----|------|-----|----|-----|----|------|-----|-----|-----|------|------|-----|-----|----|
| <i>Hemigrapsus sanguineus</i>  | —   | —    | —   | —   | —    | —   | —    | —  | +   | +    | —   | —    | —   | —  | —   | +  | +    | +   | —   | —   | —    | —    | —   | —   |    |
| <i>Homarus americanus</i>      | —   | —    | —   | —   | —    | —   | —    | —  | +   | +    | +   | —    | —   | —  | —   | +  | —    | +   | —   | —   | +    | —    | +   | —   |    |
| <i>Idotea balthica</i>         | —   | +    | +   | —   | +    | +   | +    | +  | +   | +    | +   | +    | +   | +  | +   | —  | +    | +   | +   | +   | —    | —    | —   | —   |    |
| <i>Idotea phosphorea</i>       | —   | —    | —   | —   | —    | —   | —    | —  | +   | +    | +   | —    | —   | —  | —   | +  | +    | —   | +   | —   | —    | +    | —   | —   |    |
| <i>Jaera albifrons</i>         | —   | —    | —   | —   | +    | +   | +    | —  | +   | +    | +   | +    | +   | —  | —   | +  | +    | +   | —   | +   | +    | +    | +   | +   |    |
| <i>Platorchestia platensis</i> | —   | —    | —   | —   | +    | —   | —    | —  | —   | —    | —   | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   |    |
| <i>Pagurus acadianus</i>       | —   | —    | —   | —   | —    | —   | —    | —  | +   | —    | —   | —    | —   | —  | +   | +  | —    | +   | +   | +   | +    | —    | —   | —   |    |

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| <i>Pagurus longicarpus</i>      | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Phoxichilidium femoratum</i> | — | — | — | — | — | — | — | — | + | + | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Pycnogonum litorale</i>      | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — | — |
| <i>Semibalanus balanoides</i>   | + | + | + | + | — | + | — | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>MOLLUSCA</b>                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <i>Acanthodoris pilosa</i>      | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Adalaria proxima</i>         | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — |
| <i>Aeolidia papillosa</i>       | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + |
| <i>Anomia simplex</i>           | + | + | — | — | + | + | — | + | + | + | — | + | — | + | — | — | — | + | + | — | — | — | — |
| <i>Heteranomia squamula</i>     | — | — | — | — | — | — | — | — | + | + | + | + | + | — | — | — | — | — | — | — | — | — | — |
| <i>Buccinum undatum</i>         | — | — | — | — | — | — | — | — | + | + | — | — | + | — | — | — | — | — | — | — | — | + | + |
| <i>Cadlina laevis</i>           | — | — | — | — | — | — | — | — | + | + | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Coryphella verrucosa</i>     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | + | — | — | — | — | — |
| <i>Solamen glandula</i>         | — | — | — | — | — | — | — | — | + | — | — | — | — | + | — | — | — | — | — | — | — | — | — |
| <i>Crepidula fornicate</i>      | — | — | — | — | — | — | — | — | + | + | — | — | — | — | + | + | + | + | + | + | — | — | — |
| <i>Crepidula plana</i>          | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | — | — | — |
| <i>Dendronotus frondosus</i>    | — | — | + | — | — | — | — | + | — | — | — | — | + | — | — | — | — | — | — | — | — | — | — |
| <i>Dendronotus frondosus</i>    | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + |
| <i>Heteranomia squamula</i>     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | + | + | + | + | + | + |
| <i>Hiatella arctica</i>         | + | + | + | — | + | — | + | + | + | + | — | + | — | + | + | + | + | + | + | + | — | + | + |
| <i>Ilyanassa obsoleta</i>       | — | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Lacuna vincta</i>            | — | — | — | — | — | + | + | + | + | — | — | — | + | — | + | — | — | + | + | + | — | — | + |

|                                  | 2004 |      |     |     |      | 2007 |      |    |     |      | 2012 |      |     |    |     |    |      |     |     |     |      |      |     |     |    |
|----------------------------------|------|------|-----|-----|------|------|------|----|-----|------|------|------|-----|----|-----|----|------|-----|-----|-----|------|------|-----|-----|----|
|                                  | SPt  | BiSl | PPt | MPt | PMPt | RHd  | RoBl | WQ | SPt | BiSl | PPt  | ScPt | RHd | WQ | SPt | BP | BiSl | BHd | PPt | MPt | ScPt | PMPt | RHd | BPt | WQ |
| <i>Littorina littorea</i>        | +    | +    | +   | +   | +    | +    | +    | +  | +   | +    | +    | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   | +  |
| <i>Littorina obtusata</i>        | +    | +    | +   | +   | +    | +    | +    | +  | +   | +    | +    | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   | +  |
| <i>Littorina saxatilis</i>       | —    | +    | +   | +   | +    | +    | +    | +  | +   | +    | +    | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   | +  |
| <i>Margarites helcinus</i>       | —    | —    | +   | +   | —    | —    | +    | +  | +   | +    | +    | +    | +   | +  | —   | —  | +    | +   | +   | +   | +    | —    | +   | +   | +  |
| <i>Modiolus modiolus</i>         | +    | +    | +   | +   | +    | +    | +    | +  | +   | +    | +    | +    | +   | —  | +   | +  | +    | +   | +   | +   | —    | —    | +   | +   | +  |
| <i>Mytilus edulis</i>            | +    | +    | +   | —   | +    | +    | —    | —  | +   | +    | +    | +    | +   | +  | +   | +  | +    | +   | +   | +   | +    | +    | +   | +   | +  |
| <i>Nucella lapillus</i>          | +    | +    | +   | +   | +    | +    | +    | +  | +   | +    | +    | +    | +   | +  | +   | +  | +    | +   | +   | +   | —    | —    | +   | +   | +  |
| <i>Onchidoris bilamellata</i>    | +    | —    | —   | —   | —    | —    | —    | —  | +   | —    | —    | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Onchidoris muricata</i>       | —    | —    | —   | —   | —    | —    | —    | —  | +   | —    | —    | —    | —   | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Stenosemus albus</i>          | —    | —    | —   | —   | +    | +    | +    | +  | —   | +    | —    | +    | +   | +  | —   | +  | +    | —   | +   | —   | +    | —    | +   | +   | +  |
| <i>Testudinalia testudinalis</i> | +    | +    | +   | +   | +    | +    | +    | +  | +   | +    | +    | +    | —   | +  | +   | +  | +    | +   | +   | +   | —    | +    | +   | +   | +  |

|                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <i>Tonicella marmorea</i>       | — | — | + | — | — | — | — | — | + | — | — | — | — | — | + | — | — | — | — | — | — | — | — |   |
| <i>Boreochiton ruber</i>        | — | — | — | — | — | — | — | — | + | — | — | — | + | + | — | — | — | — | — | — | — | — | — |   |
| <b>BRYOZOA</b>                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <i>Alcyonidium hirsutum</i>     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | — | — | — | — | — | — | — | — |
| <i>Bugulina simplex</i>         | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| <i>Crisularia turrita</i>       | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | — | + | — | + | + | + |
| <i>Callopora sedovi</i>         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | — | — | — | + | + | — | + | + |
| <i>Cryptosula pallasiana</i>    | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | — | — | — | — | — | — |
| <i>Dendrobeania murrayana</i>   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + |
| <i>Disporella hispida</i>       | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | + | + | — | — | — | — |
| <i>Electra pilosa</i>           | — | — | — | — | — | — | — | — | + | + | + | — | — | + | + | + | + | + | + | + | + | + | + | + |
| <i>Eucratea loricata</i>        | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | + | — | — | — | — | — |
| <i>Flustrellidra hispida</i>    | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | + | + | + | + | + | + | + | + |
| <i>Celleporella hyalina</i>     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + |
| <i>Membranipora membranacea</i> | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | — | + | + | + | + | — | + | + | — |
| <i>Schizoporella unicornis</i>  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | + | + | + | + | + | + | — | + | — | — |
| <b>ECHINODERMATA</b>            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <i>Amphipholis squamata</i>     | + | — | + | — | — | — | — | — | + | — | + | + | + | + | + | + | — | — | — | + | + | + | — | — |

|  | 2004 |      |     |     |      |     | 2007 |    |     |      |     |      | 2012 |    |     |    |      |     |     |     |      |      |     |     |    |
|--|------|------|-----|-----|------|-----|------|----|-----|------|-----|------|------|----|-----|----|------|-----|-----|-----|------|------|-----|-----|----|
|  | SPt  | BIsl | PPt | MPt | PMPt | RHd | RoBl | WQ | SPt | BIsl | PPt | ScPt | RHd  | WQ | SPt | BP | BIsl | BHd | PPt | MPt | ScPt | PMPt | RHd | BPt | WQ |
| <i>Asterias rubens</i>                   | —    | —    | +   | —   | —    | —   | —    | —  | +   | +    | +   | +    | +    | +  | +   | +  | —    | +   | +   | —   | +    | +    | +   | +   | +  |
| <i>Asterias forbesi</i>                  | —    | +    | +   | +   | +    | —   | +    | —  | +   | +    | +   | +    | —    | —  | +   | +  | —    | +   | +   | +   | +    | —    | —   | —   | —  |
| <i>Cucumaria frondosa</i>                | —    | —    | —   | —   | —    | —   | —    | —  | —   | —    | —   | —    | —    | —  | —   | —  | —    | —   | —   | —   | +    | +    | —   | +   | +  |
| <i>Henricia sanguinolenta</i>            | —    | —    | —   | —   | —    | —   | —    | —  | +   | —    | +   | +    | +    | +  | +   | +  | —    | —   | —   | +   | +    | +    | —   | +   |    |
| <i>Leptasterias littoralis</i>           | —    | —    | —   | —   | —    | —   | —    | —  | —   | —    | +   | +    | +    | —  | —   | —  | —    | —   | +   | —   | —    | +    | +   | —   |    |
| <i>Ophioderma brevispinum</i>            | —    | —    | —   | —   | —    | —   | —    | —  | —   | —    | —   | —    | —    | —  | —   | +  | —    | —   | —   | —   | —    | —    | —   | —   | +  |
| <i>Ophiopholis aculeata</i>              | —    | —    | —   | —   | —    | —   | —    | —  | —   | —    | —   | —    | —    | —  | —   | +  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Strongylocentrotus droebachiensis</i> | +    | —    | +   | +   | +    | —   | —    | —  | +   | +    | +   | +    | +    | +  | +   | +  | +    | +   | +   | +   | +    | —    | +   | +   | +  |
| <b>CHORDATA</b>                          |      |      |     |     |      |     |      |    |     |      |     |      |      |    |     |    |      |     |     |     |      |      |     |     |    |
| <i>Aplidium pallidum</i>                 | +    | +    | +   | +   | +    | +   | +    | +  | —   | —    | —   | —    | —    | —  | +   | +  | +    | +   | +   | +   | +    | +    | —   | —   | +  |
| <i>Ascidia callosa</i>                   | —    | —    | —   | —   | —    | —   | —    | —  | +   | +    | —   | +    | +    | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | —  |
| <i>Boltenia echinata</i>                 | —    | —    | —   | —   | —    | —   | —    | —  | —   | —    | —   | —    | —    | —  | —   | —  | —    | —   | —   | —   | —    | —    | —   | —   | +  |
| <i>Botrylloides violaceus</i>            | —    | —    | —   | —   | —    | +   | —    | —  | +   | +    | +   | —    | —    | —  | +   | +  | +    | +   | +   | +   | +    | —    | —   | —   | —  |
| <i>Botryllus schlosseri</i>              | —    | —    | —   | —   | —    | —   | —    | —  | +   | —    | —   | —    | —    | —  | +   | +  | +    | —   | —   | +   | —    | —    | —   | —   | —  |
| <i>Didemnum albicum</i>                  | —    | —    | —   | —   | —    | —   | —    | —  | —   | —    | —   | —    | —    | —  | —   | —  | +    | +   | —   | +   | +    | —    | —   | —   | +  |

|                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <i>Didemnum vexillum</i>      | — | — | — | — | — | — | — | — | — | — | — | + | + | + | + | + | + | — | — | — | — | — |
| <i>Diplosoma listerianum</i>  | — | — | — | — | — | — | — | — | — | — | — | + | — | + | — | + | — | — | — | — | — | — |
| <i>Halocynthia pyriformis</i> | — | — | — | — | — | + | — | + | — | — | — | — | — | — | — | — | — | — | — | — | — | + |
| <i>Molgula manhattensis</i>   | + | — | + | — | — | — | + | + | + | — | — | + | + | — | — | — | — | — | — | — | — | — |
| <i>Molgula citrina</i>        | — | — | — | — | — | — | — | — | — | — | — | — | + | — | — | — | + | + | + | + | — | + |

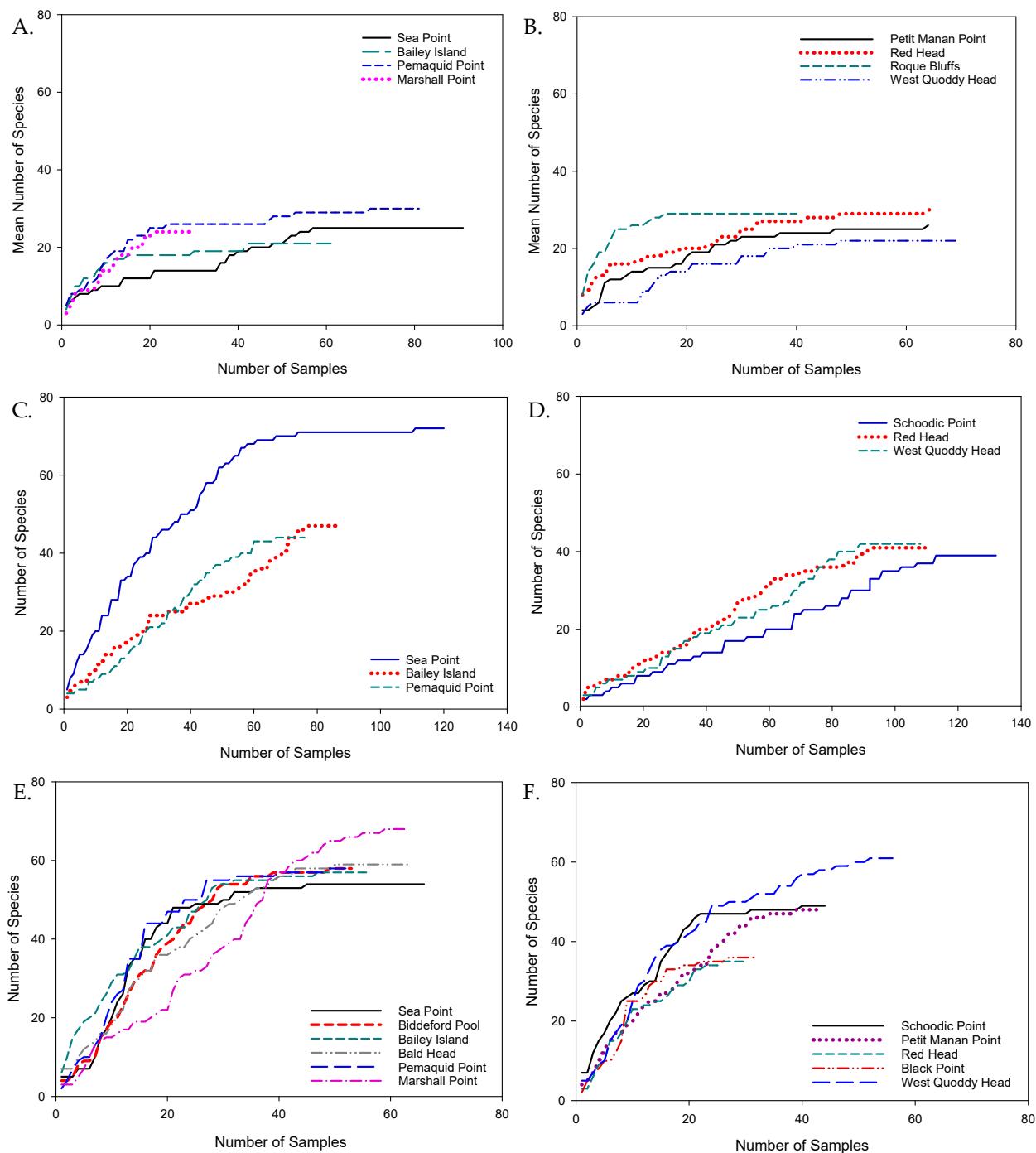


Figure S1. Species accumulation curves for all surveyed locations and years. Curves from 2004 surveys based on three sample transects at each location. Curves from walk about surveys based on number of species per 10x10cm quadrat. A., southern GoM 2004; B., northern GoM 2004; C., southern GoM 2007; D., northern GoM 2007; E., southern GoM 2012; F., northern GoM 2012.