# APPENDIX 1

**Table 1S.** Feeding habits, habitats, meadows, frequencies, and relative abundances of molluscs associated with the *Halodule wrightii* meadows in Barra Grande, Piauí State, northeastern Brazil.

| **Class** | **Family** | **Species** | **Feeding habits** | **Habitat** | **Meadow** | **Frequency** | **Relative abundance (%)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gastropoda** | Bullidae | *Bulla occidentalis (*A. Adams, 1850) | HER | EPI | A, B, C | Constant | 1.01 |
| Cerithiidae | *Bittiolum varium* (Pfeiffer, 1840) | GRA | EPI | C | Rare | 0.07 |
| Columbellidae | *Columbella mercatoria* (Linnaeus, 1758) | HER | EPI | B | Rare | 0.07 |
| *Mitrella pusilla* (Sowerby, 1844) | CAR | EPI | A, B | Rare | 0.34 |
| Cylichnidae | *Acteocina bullata* (Kiener, 1834) | CAR | EPI | A, C | Common | 0.20 |
| Dorididae | *Doris kyolis* (Ev. Marcus & Er. Marcus, 1967) | CAR | EPI | C | Rare | 0.07 |
| Epitoniidae | *Epitonium krebsii* (Mörch, 1875) | CAR | EPI | B | Rare | 0.07 |
| Fissurelidae | *Fissurella* sp. | HER | EPI | C | Rare | 0.27 |
| Haminoeidae | *Haminoea antillarum* (d'Orbigny, 1841) | HER | EPI | B, C | Common | 0.41 |
| Litiopidae | *Alaba incerta* (d'Orbigny, 1841) | GRA | EPI | A, B, C | Constant | 21.97 |
| Marginellidae | *Marginella cloveri* (Rios & Matthews, 1972) | CAR | EPI | B, C | Common | 0.27 |
| *Volvarina avena* (Kiener, 1834) | CAR | EPI | A, B, C | Common | 0.47 |
| *Volvarina albolineata* (d'Orbigny, 1842) | CAR | EPI | B, C | Rare | 0.34 |
| Neritidae | *Neritina virginea* (Linnaeus, 1758) | GRA | EPI | A,B | Constant | 21.64 |
| *Smaragdia viridis*(Linnaeus, 1758) | HER | EPI | A, B, C | Constant | 15.21 |
| Olivellidae | *Olivella floralia* (Duclos, 1844) | CAR | EPI | B | Rare | 0.07 |
| *Olivella minuta* (Link, 1807) | CAR | EPI | B | Common | 0.74 |
| Phasianellidae | *Eulithidium affine* (C. B. Adams, 1850) | GRA | EPI | A, B, C | Constant | 31.91 |
| Pseudomelatomidae | *Crassispira fuscescens* (Reeve, 1843) | CAR | EPI | B | Rare | 0.07 |
| Pyramidellidae | *Chrysallida gemmulosa* (C. B. Adams, 1850) | PAR | EPI | A, B, C | Common | 0.41 |
| *Odostomia laevigata* (d'Orbigny, 1841) | PAR | EPI | A, B, C | Common | 1.42 |
| *Turbonilla brasiliensis* (Clessin, 1902) | PAR | EPI | A, B, C | Common | 0.81 |
| *Turbonilla dispar* (Pilsbry, 1897) | PAR | EPI | A | Common | 0.20 |
| *Turbonilla* sp. | PAR | EPI | A, C | Common | 0.34 |
| *Boonea jadisi* (Olsson & McGinty, 1958) | PAR | EPI | A, B, C | Common | 1.42 |
| **Polyplacophora** | Ischnochitonidae | *Ischnochiton striolatus* (Gray, 1828) | GRA | EPI | C | Rare | 0.20 |
| **Bivalvia** | Corbulidae | *Caryocorbula cymella* (Dall, 1881) | FIL | INF | C | Rare | 1.04 |
| *Caryocorbula swiftiana* (C. B. Adams, 1852) | FIL | INF | A, B, C | Common | 2.60 |
| Crassatellidae | *Crassinella lunulata* (Conrad, 1834) | FIL | INF | A, C | Common | 2.08 |
| Lucinidae | *Codakia orbicularis* (Linnaeus, 1758) | FIL | INF | C | Common | 1.04 |
| *Divaricella quadrisulcata* (d'Orbigny, 1846) | FIL | INF | A, B, C | Common | 2.60 |
| *Parvilucina pectinella* (C. B. Adams, 1852) | FIL | INF | A, B, C | Constant | 6.77 |
| *Phacoides pectinatus* (Gmelin, 1791) | FIL | INF | A | Rare | 0.52 |
|  | *Lucinidae* sp.1 | FIL | INF | A | Rare | 0.52 |
| Lyonsiidae | *Entodesma beana* (d'Orbigny, 1853) | FIL | EPI | C | Rare | 0.52 |
| Mactridae | *Mactrotoma fragilis (*Gmelin, 1791) | FIL | INF | B, C | Rare | 2.60 |
| Myidae | *Sphenia fragilis* (H. Adams & A. Adams, 1854) | FIL | EPI | A, B, C | Constant | 13.02 |
| Mytilidae | Mytilidae sp1 | FIL | EPI | A, B | Rare | 1.04 |
| *Musculus lateralis* (Say, 1822) | FIL | EPI | C | Rare | 1.56 |
| Nuculidae | *Nucula brasiliana* *(*Esteves, 1984) | FIL | INF | A, B, C | Constant | 14.58 |
| Pteriidae | *Pinctada imbricata* (Röding, 1798) | FIL | EPI | A, B, C | Common | 10.93 |
| Semelidae | *Cumingia coarctata* *(*G, B, Sowerby I, 1833) | FIL | INF | B, C | Common | 2.60 |
| *Ervilia nitens* (Montagu, 1808) | FIL | INF | A | Rare | 0.52 |
| Tellinidae | *Tellina* sp. | FIL | INF | A | Rare | 0.52 |
| *Tellina* cf. *lineata* (Turton, 1819) | FIL | INF | B | Rare | 0.52 |
| *Tellina* cf. *alternata* (Say, 1822) | FIL | INF | A, B, C | Constant | 6.25 |
| *Tellina* cf*. angulosa* (Gmelin, 1791) | FIL | INF | A, B | Constant | 2.60 |
| *Tellina* cf. *tayloriana*(G. B. Sowerby II, 1867) | FIL | INF | A, B | Common | 6.77 |
| *Macoma pseudomera* (Dall & Simpson, 1901) | FIL | INF | C | Rare | 0.52 |
| Ungulinidae | *Diplodonta* sp, | FIL | INF | A, B, C | Common | 4.68 |
| Veneridae | *Anomalocardia brasiliana* (Gmelin, 1791) | FIL | INF | A | Constant | 10.41 |
| *Chione subrostrata* (Lamarck, 1818) | FIL | INF | A | Rare | 2.60 |
| Veneridae sp1 | FIL | INF | A | Rare | 0.52 |

CAR: carnivore; FIL: filter; GRA: grazers; HER: herbivore; PAR: parasite. EPI: epifauna (bissus); INF: infauna.



**Fig. 1S.** Species of Gastropoda and Polyplacophora associated with *Halodule wrightii* meadows in Barra Grande beach, Piauí, NE Brazil. (A) *Acteocina bullata* (Kiener, 1834); (B) *Alaba incerta* (d'Orbigny, 1841); (C) *Bittiolum varium (*Pfeiffer, 1840*)*; (D) *Boonea jadisi* (Olsson & McGinty, 1958*);* (E) *Chrysallida gemmulosa* (C. B. Adams, 1850); (F) *Columbella mercatoria* (Linnaeus, 1758); (G) *Crassispira fuscescens* (Reeve, 1843); (H) *Epitonium krebsii* (Mörch, 1875); (I) *Eulithidium affine* (C. B. Adams, 1850*)*; (J) Fissurelidae sp.1; (K) *Ischnochiton striolatus* (Gray, 1828); (L) *Marginella cloveri* (Rios & Matthews, 1972); (M) *Mitrella pusilla* (Sowerby, 1844); (N) *Neritina virginea* (Linnaeus, 1758*)*; (O) *Odostomia laevigata* (d'Orbigny, 1841*)*; (P) *Olivella floralia (*Duclos, 1844*)*; (Q) *Olivella minuta* (Link, 1807); (R) *Smaragdia viridis (*Linnaeus, 1758*)*; (S) *Turbonilla brasiliensis* (Clessin, 1902*)*; (T) *Turbonilla díspar* (Pilsbry, 1897*);* (U) *Turbonilla* sp.; (V) *Volvarina albolineata (*d'Orbigny, 1842*)*; (W) *Volvarina avena (*Kiener, 1834*)*; (X) *Bulla occidentalis* (A. Adams, 1850*)*. Scale bars: 1mm.



Fig. 2S. Some species of Bivalvia associated with *Halodule wrightii* meadows in Barra Grande beach, Piauí, NE Brazil. (A) *Anomalocardia brasiliana* (Gmelin, 1791*)*; (B) *Sphenia fragilis* (H. Adams & A. Adams, 1854*)*; (C) *Caryocorbula cyumella* (Dall, 1881); (D Caryocorbula swiftiana (C. B. Adams, 1852); (E) *Chione subrostrata* (Lamarck, 1818*);* (F) *Codakia orbicularis* (Linnaeus, 1758*);* (G) *Crassinella lunulata* (Conrad, 1834*)*; (H) *Cumingia coarctata* (G, B, Sowerby I, 1833*)*; (I) *Divaricella quadrisulcata* (d'Orbigny, 1846); (J) *Entodesma beana* (d'Orbigny, 1853); (K) *Pincatada imbricata* (Röding, 1798); (L) *Mactrotoma fragilis* (Gmelin, 1791*)*; (M) *Musculus lateralis* (Say, 1822); (N) *Nucula brasiliana* (Esteves, 1984*)*; (O) *Parvilucina pectinellav* (C. B. Adams, 1852*)*; (P) *Phacoides pectinatus* (Gmelin, 1791); (Q) Mytilidae sp1; (R) Veneridae sp.1. Scale bars: 1mm.