

## **Appendix III**

### Occurrence of Molluscan Taxa Identified in Selected Whole-Core Samples

### Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification                                  | Species range   | Reported formations  | Paleoenvironment   | Additional comments |
|-----------|--|---|---|--|--|---------------------|
| G-3678    | 22                                     | <i>Planorbella duri/disstoni</i>                | For <i>P. duryi</i> Pleistocene-Holocene. For <i>P. disstoni</i> Pliocene-Pleistocene | For <i>P. duryi</i> Bermont, Fort Thompson. For <i>P. disstoni</i> Caloosahatchee, Fort Thompson | Freshwater.  |                     |
| G-3678    | 22                                     | <i>Pomacea paludosa</i> Say                     | Pliocene-Holocene   |  | Common in slow-moving or stagnant water. Can breathe water and air. Lays small hard shelled eggs fixed to wood and plants.   |                     |
| G-3678    | 29                                     | <i>Anodontia alba?</i>                          | Pleistocene-Holocene  | Bermont, Fort Thompson   | Typically estuarine (salinity 25,000-40,000+ mg/L dissolved solids), relatively shallow water, mud or sand substrate,  |                     |
| G-3678    | 29                                     | <i>Chione cancellata</i>                        | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |                     |
| G-3678    | 29                                     | <i>Trachycardium</i> sp. cf. <i>muricatum</i>   |   |  | Typically in shallow water on sandy or muddy bottoms.  |                     |
| G-3679    | 16                                     | <i>Planorbella duryi-disstoni</i>               | For <i>P. duryi</i> Pleistocene-Holocene. For <i>P. disstoni</i> Pliocene-Pleistocene | For <i>P. duryi</i> Bermont, Fort Thompson. For <i>P. disstoni</i> Caloosahatchee, Fort Thompson | Freshwater.  |                     |
| G-3679    | 22                                     | <i>Chione cancellata</i>                        | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |                     |
| G-3679    | 22                                     | <i>Trachycardium</i> sp. cf. <i>egmontianum</i> |   |  | Typically in shallow water on sandy or muddy bottoms.  |                     |
| G-3679    | 31                                     | <i>Americardia</i> sp.                          |   |  | Genus is shallow water.  |                     |
| G-3679    | 31                                     | <i>Anodontia alba?</i>                          | Pleistocene-Holocene  | Bermont, Fort Thompson   | Typically estuarine (25,000-40,000+ mg/L dissolved solids), relatively shallow water, mud or sand substrate.   |                     |
| G-3679    | 31                                     | <i>Chione cancellata</i>                        | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |                     |
| G-3679    | 31                                     | <i>Dosinia elegans</i>                          | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Shallow water, sandy substrate, fairly open marine conditions; polyhaline-euhaline (25,000-40,000 mg/L dissolved solids).  |                     |
| G-3679    | 31                                     | <i>Lucinisca nassula</i>                        | Pliocene?, Pleistocene to Holocene  | Caloosahatchee, Bermont, Fort Thompson   | Common in shallow water.   |                     |
| G-3679    | 31                                     | <i>Trachycardium</i> cf. <i>muricatum</i>       |   |  | Typically in shallow water on sandy or muddy bottoms.  |                     |

### Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples (Continued)

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification                    | Species range   | Reported formations  | Paleoenvironment   | Additional comments  |
|-----------|--|-----------------------------------|---|--|--|--|
| G-3679    | 31                                     | <i>Turbo castaneus</i>            | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Typically shallow water grass or algal beds and polyhaline to euhaline (20,000-35,000 mg/L dissolved solids). More common in central and western Florida Bay and on Featherbed Bank in Biscayne Bay.   |  |
| G-3679    | 31                                     | <i>Turritella subannulata</i>     | Pliocene, Pleistocene, Holocene?  | Chipola, Caloosahatchee, Bermont, Fort Thompson  | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |  |
| G-3679    | 38                                     | <i>Chione cancellata</i>          | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |  |
| G-3680    | 17                                     | <i>Physa</i> sp.                  |   |  |  |  |
| G-3680    | 17                                     | <i>Planorbella duryi-disstoni</i> | For <i>P.duryi</i> Pleistocene-Holocene.<br>For <i>P. disstoni</i> Pliocene- Pleistocene  | For <i>P.duryi</i> Bermont, Fort Thompson. For <i>P. disstoni</i> Caloosahatchee , Fort Thompson | Freshwater.  |  |
| G-3680    | 17                                     | <i>Pomacea paludosa</i> Say       | Pliocene-Holocene   |  | Common in slow-moving or stagnant water. Can breathe water and air. Lays small hard shelled eggs fixed to wood and plants.   |  |
| G-3680    | 37                                     | <i>Hydrobiidae?</i>               |   |  | Freshwater.  |  |
| G-3680    | 37                                     | <i>Physa</i> sp.?                 |   |  | Freshwater.  |  |
| G-3680    | 37                                     | <i>Planorbella duryi-disstoni</i> | For <i>P. duryi</i> Pleistocene-Holocene.<br>For <i>P. disstoni</i> Pliocene- Pleistocene | For <i>P. duryi</i> Bermont, Fort Thompson. For <i>P. disstoni</i> Caloosahatchee                | Freshwater.  |  |
| G-3680    | 37                                     | <i>Planorbella scalaris?</i>      | Pliocene-Holocene   | Caloosahatchee, Bermont, Fort Thompson   | Freshwater.  |  |
| G-3681    | 36                                     | <i>Codakia orbicularis</i>        | Pleistocene, Holocene   | Bermont  | Commonly considered an ocean shelf species, occurring at depths >30 ft in sand, and salinities 25,000-40,000 mg/L dissolved solids, but modern Florida species found in shallow water, usually near grassy flats.  |  |
| G-3681    | 36                                     | <i>Lucina pensylvanica</i>        | Pliocene-Holocene   | Caloosahatchee, Fort Thompson  | Common in shallow water.   |  |
| G-3681    | 37.5                                   | <i>Luciniscia nassula</i>         | Pliocene?, Pleistocene to Holocene  | Caloosahatchee?, Bermont, Fort Thompson  | Common in shallow water.   |  |
| G-3695    | 21.08 to 21.58                         | <i>Brachidontes exustus</i>       | Pliocene-Holocene   | Caloosahatchee, Fort Thompson  | Typically estuarine; tolerates wide range of salinity from ~10,000-40,000+ mg/L dissolved solids, and low oxygen. Frequently found on macrobenthic algae or <i>Thalassia</i> , but can attach to any surface.  | Numerous small gastropods & pelecypods.                                    |
| G-3695    | 21.08 to 21.58                         | <i>Anomalocardia?</i>             |   |  |  |  |
| G-3695    | 21.08 to 21.58                         | <i>Muricid</i>                    |   |  |  |  |
| G-3695    | 21.58 to 22.25                         | <i>Nothing identifiable</i>       |   |  |  |  |
| G-3695    | 30.08 to 30.58                         | <i>Nothing identifiable</i>       |   |  |  | Very small gastropods and pelecypods; too small to identify from material. |
| G-3695    | 31.25 to 31.75                         | <i>Diplodonta</i> sp.             |   |  |  | Numerous small gastropods.   |

## Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples (Continued)

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification                    | Species range                   | Reported formations                             | Paleoenvironment   | Additional comments   |
|-----------|--|-----------------------------------|---------------------------------|---|--|---|
| G-3695    | 31.75 to 32.33                         | <i>Chione cancellata</i>          | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | Numerous other small pelecypods - nothing identifiable.                 |
| G-3695    | 31.75 to 32.33                         | <i>Anadara sp. cf. aequalitas</i> |                                 |   | Genus typically near normal marine.  |   |
| G-3695    | 32.33 to 32.67                         | <i>Strombus?</i> sp.              |                                 |   | Either species is indicative of a reef setting. They crawl along on sandy bottoms around the reef.   | Large gastropod--either <i>Strombus</i> or <i>Vasum</i> .               |
| G-3695    | 32.67 to 33.17                         | <i>Chione cancellata</i>          | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |   |
| G-3695    | 33.17 to 33.67                         | <i>Chione cancellata</i>          | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |   |
| G-3695    | 33.17 to 33.67                         | <i>Carditamera floridana</i>      | Pliocene-Holocene               | Caloosahatchee, Fort Thompson                   | Polyhaline to euhaline (18,000-35,000 mg/L dissolved solids). Attaches to sub-aquatic vegetation or hard surfaces.   |   |
| G-3695    | 33.17 to 33.67                         | <i>Pleuromeris tridenta</i>       | Pliocene-Holocene               | Caloosahatchee, Fort Thompson                   | Reported to be a shallow water species.  |   |
| G-3695    | 33.67 to 34.33                         | <i>Turritella subannulata</i>     | Pliocene-Pleistocene, Holocene? | Chipola, Caloosahatchee, Bermont, Fort Thompson | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |   |
| G-3695    | 33.67 to 34.33                         | <i>Anadara sp. cf. aequalitas</i> |                                 |   |  |   |
| G-3695    | 33.67 to 34.33                         | <i>Chione cancellata</i>          | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |   |
| G-3695    | 33.67 to 34.33                         | <i>Glycymeris americana?</i>      | Miocene-Holocene                |   |  |   |
| G-3696    | 30.33 to 30.92                         | <i>Chione cancellata</i>          | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | <i>Chione</i> extremely abundant in this sample.                        |
| G-3696    | 30.92 to 31.25                         | <i>Chione cancellata</i>          | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline, 16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | <i>Chione</i> extremely abundant in this sample.                        |
| G-3696    | 30.92 to 31.25                         | <i>Turritella subannulata</i>     | Pliocene-Pleistocene, Holocene? | Chipola, Caloosahatchee, Bermont, Fort Thompson | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |   |
| G-3696    | 30.92 to 31.25                         | <i>Planorbella</i> sp.            |                                 |   | Freshwater gastropod.  | Indicates mixing of marine and freshwater environments in this section. |

### Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples (Continued)

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification                                   | Species range  | Reported formations                                | Paleoenvironment   | Additional comments  |
|-----------|--|--|--|--|--|--|
| G-3720    | 7                                      | <i>Chione cancellata</i>                         | Pliocene-Holocene  | Caloosahatchee, Bermont, Fort Thompson             | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline, (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay.                    |  |
| G-3722    | 18                                     | <i>Chione cancellata</i>                         | Pliocene-Holocene  | Caloosahatchee, Bermont, Fort Thompson             | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay.                     | Extremely abundant in matrix of rock.                          |
| G-3722    | 18                                     | <i>Turritella subannulata</i>                    | Pliocene- Pleistocene, possibly Holocene   | Chipola, Caloosahatchee, Bermont, Fort Thompson    | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |  |
| G-3722    | 18                                     | <i>Trachycardium</i> sp.                         |  |  | Typically in shallow water on sandy or muddy bottoms.  |  |
| G-3723    | 14.5                                   | <i>Anomalocardia concinna?</i>                   | Pleistocene  | Fort Thompson                                      | Modern <i>A. auberiana</i> tolerates tremendous fluctuations in salinity from 15,000 to 40,000+ mg/L dissolved solids. They are most abundant in Florida Bay in the northern transitional zone where fluctuations take place, living on or in the sediment, typically near grass beds. |  |
| G-3723    | 19.08 to 19.5                          | <i>Chione cancellata</i>                         | Pliocene-Holocene  | Caloosahatchee, Bermont, Fort Thompson             | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay.                         | Abundant--dominates sample.                                    |
| G-3723    | 19.08 to 19.5                          | <i>Trachycardium</i> sp. cf. <i>edomontianum</i> |  |  | Typically in shallow water on sandy or muddy bottoms.  |  |
| G-3723    | 19.08 to 19.5                          | <i>Turritella subannulata</i>                    | Pliocene-Pleistocene, Holocene?  | Chipola, Caloosahatchee, Bermont, Fort Thompson    | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |  |
| G-3723    | 19.08 to 19.5                          | <i>Phacoides (Bellucina) waccamawensis</i>       | Pliocene-Pleistocene, Holocene? [appears to be synonymous with <i>Linga amiantus</i> ] | Caloosahatchee, Bermont, Fort Thompson, James City | Modern <i>L. amiantus</i> typically lives in shallow estuarine or lower shoreface environments in sand or mud. Salinities range from 25,000-40,000 mg/L dissolved solids.  |  |
| G-3723    | 23.33                                  | <i>Anodontia alba</i>                            | Pleistocene-Holocene   | Bermont, Fort Thompson                             | Typically estuarine, relatively shallow water, mud or sand substrate. Salinity 25,000-40,000+ mg/L dissolved solids.   | Several large articulated specimens, probably <i>in situ</i> . |
| G-3723    | 23.33                                  | <i>Trachycardium</i> sp. cf. <i>egmontianum</i>  |  |  | Typically in shallow water on sandy or muddy bottoms.  |  |
| G-3723    | 28                                     | <i>Chione cancellata</i>                         | Pliocene-Holocene  | Caloosahatchee, Bermont, Fort Thompson             | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay.                     | Large and relatively abundant.                                 |
| G-3723    | 28                                     | <i>Turritella apicalis</i>                       | Pliocene   | Caloosahatchee                                     | Modern members of genus typically offshore.  |  |
| G-3723    | 28                                     | <i>Phacoides (Bellucina) waccamawensis</i>       | Pliocene-Pleistocene, Holocene? [appears to be synonymous with <i>Linga amiantus</i> ] | Caloosahatchee, Bermont, Fort Thompson, James City | Modern <i>L. amiantus</i> typically lives in shallow estuarine or lower shoreface environments in sand or mud. Salinities range from 25,000-40,000 mg/L dissolved solids.  |  |

### Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples (Continued)

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification                         | Species range                    | Reported formations  | Paleoenvironment   | Additional comments  |
|-----------|--|--|----------------------------------|--|--|--|
| G-3723    | 28                                     | <i>Diodora</i> sp. cf. <i>listeri</i>  |                                  |  | Modern <i>Diodora</i> live in a variety of environments. In Florida Bay they are found attached to <i>Thalassia</i> grass in polyhaline to euhaline water (20,000-37,000 mg/L dissolved solids). More commonly, they are found attached to hard substrates—rocks and coral rubble from intertidal to offshore. |  |
| G-3723    | 39.3                                   | <i>Pyrazisimus scalatus</i>            | Pliocene-Pleistocene             | Caloosahatchee, Fort Thompson  | Presumed to be mud flat dwellers (Lyons, 1992).  | Several large specimens.   |
| G-3723    | 39.3                                   | <i>Tagelus</i> sp.                     |                                  |  | Modern members of genus typically in shallow water, burrowed into mud or sand, intertidal to about 20 ft. Often estuarine, tolerating fluctuating salinities (15,000-40,000 mg/L dissolved solids).  | Articulated internal and external molds.   |
| G-3723    | 39.3                                   | <i>Anomalocardia concinna</i>          | Pleistocene                      | Fort Thompson  | Modern <i>A. auberiana</i> tolerates tremendous fluctuations in mg/L dissolved solids from 15,000 to 40,000+ mg/L dissolved solids. They are most abundant in Florida Bay in the northern transitional zone where fluctuations take place, living on or in the sediment, typically near grass beds.            |  |
| G-3723    | 39.3                                   | <i>Melongena corona</i>                | Pliocene?, Pleistocene-Holocene  | Caloosahatchee? [some researchers believe this species is <i>M. subcoronata</i> (Heilprin, 1887; Lyons, 1992)], Bermont, Fort Thompson | Carnivorous, shallow-water inhabitants. Commonly found in Florida Bay, crawling in large numbers across very shallow mud-flats. Frequently near mangrove islands in salinities ranging from 14,000-41,000 mg/L dissolved solids.   | Several large specimens present, able to see all critical parts—one specimen close to being whole. |
| G-3723    | 44                                     | <i>Chione cancellata</i>               | Pliocene-Holocene                | Caloosahatchee, Bermont, Fort Thompson   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay.   |  |
| G-3723    | 44                                     | <i>Modulus woodringi/bermontianus?</i> | Pliocene, Pleistocene            | <i>M. woodringi</i> from Mansfield's (1930) Cancellaria Zone, and Unit 7 Pinecrest beds. <i>M. bermontianus</i> from Bermont Beds.     | Modern <i>Modulus modulus</i> found in shallow protected water living on <i>Thalassia</i> grass in Florida Bay from 20,000-40,000 mg/L dissolved solids.   | Fairly abundant in sample.   |
| G-3723    | 44                                     | <i>Turritella subannulata?</i>         | Pliocene, Pleistocene, Holocene? | Chipola, Caloosahatchee, Bermont, Fort Thompson  | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |  |
| G-3723    | 44                                     | <i>Turritella apicalis</i>             | Pliocene                         | Caloosahatchee   | Modern members of genus typically offshore.  |  |
| G-3725    | 24                                     | <i>Planorbella duryi-disstoni</i>      |                                  | For <i>P. duryi</i> Pleistocene-Holocene. For <i>P. disstoni</i> Pliocene- Pleistocene   | Freshwater.  | Very abundant in sample.   |
| G-3725    | 24                                     | <i>Planorbella scalaris</i>            | Pliocene-Holocene                | Caloosahatchee, Bermont, Fort Thompson   | Freshwater.  | Very abundant in sample.   |
| G-3725    | 24                                     | <i>Pomacea paludosa</i>                | Pliocene-Holocene                |  | Common in slow-flowing or stagnant water. Can breathe water and air. Lays small hard shelled eggs fixed to wood and plants.  | Several large specimens present.   |
| G-3725    | 29.1                                   | <i>Codakia orbicularis</i>             | Pleistocene, Holocene            | Bermont  | Commonly considered an ocean shelf species, occurring at depths >30 ft in sand, and salinities 25,000-40,000 mg/L dissolved solids, but modern Florida species found in shallow water, usually near grass flats.   | Abundant, articulated large specimens.   |

### Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples (Continued)

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification                    | Species range                    | Reported formations                             | Paleoenvironment   | Additional comments   |
|-----------|--|-----------------------------------|----------------------------------|---|--|---|
| G-3725    | 29.1                                   | <i>Lucina pensylvanica</i>        | Pliocene-Holocene                | Caloosahatchee, Fort Thompson                   | Common in shallow water.   | Relatively abundant.  |
| G-3725    | 29.1                                   | <i>Lirophora latilirata</i>       | Miocene?, Pliocene-Holocene      | Caloosahatchee                                  | Uncommon in modern. Offshore in deep water.  |   |
| G-3732    | 13.0 to 13.5                           |                                   |                                  |   |  | Piece of gastropod--may be <i>Latirus</i> or <i>Modulus</i> .                             |
| G-3732    | 13.5 to 13.83                          | <i>Turritella subannulata</i>     | Pliocene, Pleistocene, Holocene? | Chipola, Caloosahatchee, Bermont, Fort Thompson | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |   |
| G-3732    | 13.83 to 14.17                         | <i>Chione cancellata</i>          | Pliocene-Holocene                | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |   |
| G-3732    | 21.08 to 22.25                         | <i>Turritella apicalis</i>        | Pliocene                         | Caloosahatchee                                  |  |   |
| G-3732    | 21.08 to 22.25                         | <i>Cerithium sp. cf. muscarum</i> |                                  |   |  |   |
| G-3732    | 21.08 to 22.25                         | <i>Carditamera floridana</i>      | Pliocene-Holocene                | Caloosahatchee, Fort Thompson                   | Polyhaline to euhaline (18,000-35,000 mg/L dissolved solids). Attaches to sub-aquatic vegetation or hard surfaces.   |   |
| G-3732    | 22.25 to 22.67                         | <i>Modulus modulus</i>            | Pliocene-Holocene                | Caloosahatchee, Fort Thompson                   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids) and lives on <i>Thalassia</i> .  |   |
| G-3732    | 22.25 to 22.67                         | <i>Cerithium muscarum?</i>        | Pliocene-Holocene                | Caloosahatchee, Fort Thompson                   | Mesohaline-euhaline (10,000-35,000 mg/L dissolved solids), typically found on <i>Thalassia</i> or macrobenthic algae.  |   |
| G-3732    | 22.25 to 22.67                         | <i>Codakia orbicularis</i>        | Pliocene-Holocene                | Caloosahatchee, Bermont                         | Shallow, coarse substrate, polyhaline-euhaline salinities in Florida Bay. Literature reports as a shallow shelf species at 30 ft in marine environments (Warmke and Abbott, 1962; Abbott, 1974)  |   |
| G-3732    | 23.42 to 23.75                         |                                   |                                  |   |  | Large piece of a pelecypod shell--may be a <i>Mercenaria</i> . Nothing else recognizable. |
| G-3732    | 23.75 to 24.08                         | <i>Chione cancellata</i>          | Pliocene-Holocene                | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |   |
| G-3732    | 23.75 to 24.08                         | <i>Cerithium muscarum</i>         | Pliocene-Holocene                | Caloosahatchee, Fort Thompson                   | Mesohaline-euhaline (10,000-35,000 mg/L dissolved solids), typically found on <i>Thalassia</i> or macrobenthic algae.  |   |
| G-3732    | 24.08 to 24.5                          | <i>Chione cancellata</i>          | Pliocene-Holocene                | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |   |
| G-3732    | 24.08 to 24.5                          | <i>Trachycardium sp.</i>          |                                  |   |  |   |

### Appendix III. Occurrence of molluscan taxa identified in selected whole-core samples (Continued)

[Reported formations from Hunter (1968) and Scott (1992; 2001), except where noted]

| Well name | Sample depth (feet below land surface) | Identification  | Species range                   | Reported formations                             | Paleoenvironment   | Additional comments        |
|-----------|--|---|---------------------------------|---|--|----------------------------|
| G-3732    | 28.5 to 29.08                          | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |                            |
| G-3732    | 28.5 to 29.08                          | <i>Modulus woodringi?</i><br>[?= <i>M. berrontianus</i> ] | Pliocene? Pleistocene           | Pinecrest? Bermont?                             |  | Several specimens present. |
| G-3732    | 28.5 to 29.08                          | <i>Turritella apicalis</i>                                | Pliocene                        | Caloosahatchee                                  |  | Several specimens present. |
| G-3732    | 28.5 to 29.08                          | <i>Luciniscia nassula</i>                                 | Pliocene-Holocene               | Caloosahatchee, Fort Thompson                   |  | Several specimens present. |
| G-3734    | 14.0 to 14.5                           | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |                            |
| G-3734    | 17.0 to 17.42                          | <i>Turritella subannulata</i>                             | Pliocene-Pleistocene, Holocene? | Chipola, Caloosahatchee, Bermont, Fort Thompson | Typically found in euhaline water (30,000-40,000 mg/L dissolved solids) in 19.7-39.4 ft of water.  |                            |
| G-3734    | 17.0 to 17.42                          | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | Relatively abundant.       |
| G-3734    | 18.0 to 18.17                          | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | Very abundant.             |
| G-3734    | 23.0 to 23.92                          | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. |                            |
| G-3734    | 23.0 to 23.92                          | <i>Modulus modulus</i>                                    | Pliocene-Holocene               | Caloosahatchee, Fort Thompson                   | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids) and lives on <i>Thalassia</i> .  |                            |
| G-3734    | 25.0 to 25.42                          | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | Abundant.                  |
| G-3734    | 31.42 to 31.96                         | <i>Chione cancellata</i>                                  | Pliocene-Holocene               | Caloosahatchee, Bermont, Fort Thompson          | Typically polyhaline-euhaline (24,000-35,000 mg/L dissolved solids), but can tolerate mesohaline to hypersaline (16,000-40,000+ mg/L dissolved solids). Traditionally considered infaunal in sandy and sand/mud bottoms, but found to be epifaunal in Florida Bay. | Scattered.                 |