## Table 2. Map Classifications of Marine Habitats and their Major Organisms in the Florida Keys

| Marine Habitats | Authors | Major Organisms |
|---|---|---|
| **Mangrove forest and peat**<br>Mangrove<br>Mangrove | Lidz et al., 1997a<br>Marszalek, 1977<br>Multer, 1993 | Red, black, and white mangroves with many attached organisms, such as oysters, barnacles, and anemones; habitat for many types of juvenile organisms such as crabs, shrimp, and small fish (e.g., snapper, snook, mullet) that later live in other habitats |
| **Tidal creek** | Lidz et al., 1997a | Habitat for organisms attached to mangrove roots; sea grasses on *Halimeda* sands; migratory routes for swimming marine organisms |
| **Carbonate sand on Pleistocene coral reef limestone**<br>Carbonate sand on Pleistocene limestone<br>Inshore hardbottom/limestone bedrock<br>Rock bottom with restricted circulation<br>Hardbottom | Lidz et al., 2006<br>Lidz et al., 1997a<br>Marszalek, 1977<br>Enos, 1977<br>Multer, 1993; FMRI, 2000 | Non-reef-forming stony corals, loggerhead sponges (*Spheciospongia vesparia*), gorgonians, and numerous green and brown algae dominate faunas; the coralline red alga *Neogoniolithon strictum* also important; alcyonarians and gorgonians common; turtle sea grass *Thalassia testudinum* sparse |
| **Bare Pleistocene coral reef limestone**<br>Pleistocene limestone | Lidz et al., 2006<br>Lidz et al., 1997a | Same organisms as occur in carbonate sand on Pleistocene limestone but without turtle sea grass |
| **Seagrass-covered sand on rock ledge** | Lidz et al., 2006 | Mostly *Thalassia testudinum* |
| **Coralline red algae**<br>Shoal fringe (coralline algae, finger coral)<br>Shoal fringe with restricted circulation | Lidz et al., 1997a<br>Marszalek, 1977<br>Enos, 1977 | Red coralline algae *Goniolithon* and *Lithothamnium* dominant with finger coral *Porites porites* and *P. divaricata;* turtle sea grass and green algae *(Halimeda opuntia* and *Avrainvillea nigricans)* subordinate |
| **Sea grasses on lime mud**<br>Grass-covered mud<br>Sea grass | Lidz et al., 1997a<br>Enos, 1977<br>Multer, 1993 | *Thalassia testudinum* dominant where present; scattered loggerhead sponges *Spheciospongia vesparia*, abundant 'ghost shrimp' *Callianassa*, burrowing sea cucumbers *Holothuria floridana,* and sea-biscuit urchins *Clypeaster rosaceus* |
| **Bare lime mud or seagrass-covered muddy carbonate sand**<br>Bare lime mud<br>Bare mud | Lidz et al., 2006<br>Lidz et al., 1997a<br>Enos, 1977 | Few conspicuous organisms |
| **Sea grasses on carbonate sand**<br>Sand/grass<br>Grass-covered sand<br>Sea grass<br>Sea grass<br>Continuous sea grass, patchy sea grass | Lidz et al., 1997a<br>Booker, 1997<br>Enos, 1977<br>Marszalek, 1977<br>Multer, 1993<br>FMRI, 2000 | Mixed grasses with *Thalassia testudinum* and *Syringodium filiforme* dominant; fragments of *Halimeda opuntia* and *H. trident* plates abundant in sand; sea-biscuit urchin *Clypeaster rosaceus* throughout zone; Queen conch *Strombus gigas*, Queen helmet conch *Cassis madagascariensis*, and King conch *C. tuberosa* mainly in the seaward part; cushion starfish *Oreaster reticulatus* in landward part |
| **Bare carbonate sand**<br>Barren sand or sediment<br>Bare sand<br>Bare bottom (sand or mud) | Lidz et al., 1997a<br>Marszalek, 1977<br>Enos, 1977<br>Multer, 1993 | Specialized fauna composed primarily of polychaete worms and lesser abundances of burrowing jawfish, razorfish, holothurians, sea urchins, shrimp, bivalve molluscs, crabs, and other small invertebrates inhabit the seemingly barren ecosystem; sand dollars (*Clypeaster subdepressus*) and red-heart sea urchins (*Meoma ventricosa*) plow just beneath the surface |
| **Coral rubble and carbonate sand** | Lidz et al., 1997a | Sea grasses and Queen conchs on beds of *Lithothamnium*-coated *Acropora cervicornis* and *A. palmata;* green and brown algae (*Padina* species) |
| **Coral rubble**<br>Reef rubble | Lidz et al., 1997a<br>Enos, 1977 | Sea grasses and Queen conchs |
| **Senile coral reef**<br>Offshore hardbottom, bank reef<br>Outer or dead reef with open circulation<br>Platform-margin reef | Lidz et al., 1997a<br>Marszalek, 1977<br>Enos, 1977<br>FMRI, 2000 | Loggerhead and vase sponges dominant; scattered large head corals of star coral *Montastrea annularis*, branching corals *Acropora cervicornis, Colpophyllia natans,* and *Diploria* species, and a few colonies of stunted *A. palmata*; small corals such as *Dichocoenia*; most substrate covered by stinging coral *Millepora complanata* and *M. alcicornis*; algae with holdfasts (*Penicillus* and *Halimeda* species); sea grasses with rhizomes (*Thalassia testudinum*, thin-bladed shoal sea grass *Halodule wrightii*, and cylindrical manatee sea grass *Syringodium filiforme*); sea fans (*Gorgonia flabellum*), black spiny sea urchin (*Diadema antillarum*), and red algae (*Lithothamnium* species); habitat for numerous fish species |
| **Live coral reef**<br>Live coral reef | Lidz et al., 1997a<br>Multer, 1993 | Large heads of *Montastrea annularis, Diploria labyrinthiformis,* or *Siderastrea* species, and other species of head corals with abundant alcyonarians, gorgonians, and *Halimeda* species |
| **Sand halo around patch reef**<br>Patch reef<br>Patch reef | Lidz et al., 1997a<br>Marszalek, 1977<br>Enos, 1977; FMRI, 2000 | Amphipods, and presumably the same organisms as occur in bare carbonate sand |
| **Manmade treasure-salvor sand holes** | Lidz et al., 2006 | Unknown, but presumably the same organisms as occur in bare carbonate sand |
| **Bare Pleistocene oolitic limestone**<br>**Carbonate sand on Pleistocene oolitic limestone** | Lidz et al., 2006<br>Lidz et al., 2006 | Both habitats occur in the lower Keys and on the Marquesas-Quicksands ridge, where *Halimeda opuntia, H. incrassata,* and *Thalassia testudinum* are the primary organisms on the sands |
| **Outlier reef**<br>(on sand-covered upper-slope terrace) | Lidz et al., 2006 | Offshore hardbottom consists of dominant loggerhead and vase sponges, gorgonians, scattered head corals of all kinds, and scattered staghorn corals; seaward of outlier reefs are sands with algal nodules made of alternating layers of coralline algae and encrusting foraminifera |