Common Coral Species Associated with Southwest Florida Hardbottom Communities

Although present, the diversity of stony and soft corals found off Southwest Florida's coast is severely limited compared to what is found on Florida's east coast. Seasonal temperature fluctuations and high turbidity rates characteristic of Gulf waters provide a less than hospitable environment for most corals. Yet, several hardy species do inhabit the region.

Much of the shallow continental shelf off Southwest Florida consists of unconsolidated sand and shell rubble substrates overlying a limestone baserock. Isolated tracks of natural hardbottom ledges and rock outcroppings as well as artificial reefs are interspersed throughout the region providing suitable substrate for coral colonization.

Unlike many of the corals found in the Florida Keys, corals that are associated with Southwest Florida's hardbottom communities, do not construct living reefs. They typically form isolated colonies. These corals and other associated biota including macroalgae, tunicates, sponges, hydroids, and bryozoans contribute to the productivity of Southwest Florida's unique hardbottom communities. They help provide structure, protection, and food sources for a variety of fish assemblages and invertebrates including recreational and commercially important species such as red grouper (*Epinephelus morio*), gag grouper (*Mycteroperca microlepis*), and Florida stone crab (*Menippe mercenaria*).

**Common Hard and Soft Corals**

While not an exhaustive list, below are examples of common hard and soft corals associated with natural and artificial hardbottom communities in Southwest Florida.

**Knobby Star Coral** (*Solenastrea hyades*) is one of the most common hard corals found on nearshore natural hardbottoms in Southwest Florida. Their colonies have lobated heads with irregular bulges on the surface, and range from a few inches up to two feet in length. Colors range from yellow-brown to cream to tan. The polyps can often be seen feeding during the day.

**Starlet Coral** (*Siderastrea spp*) colonies form irregular rounded domes and mounds and vary in color from golden-brown and brown to gray. Colonies can range from a few inches to several feet.
Robust Ivory Tree Coral (*Oculina robusta*) colonies are less common than the star and starlet corals. Coral colonies form large busy, tree-like structures with a thick base. Colonies can reach close to three feet in length and tend to be yellowish brown.

**Tube Coral** (*Cladocora arbuscula*) colonies form small densely branching clumps with fine ridges running their length. Colonies are usually only several inches and range from tan to golden brown to dark brown in color.

Hidden Cup Coral (*Phylangia americana*) colonies form small encrusting groups of polyps less than an inch wide. They are found on the undersides of ledges or encrusted onto the surface of outcroppings and typically yellowish to reddish brown in color.

**Colorful Sea Whips** (*Leptogorgia virgulata*) form long straight, stiff, moderately-branched stalks. They can range from yellow to orange to lavender or purple. Their highly visible polyps are translucent white.

**Regal Sea fans** (*Leptogorgia hebes*) colonies are characterized by being flat and thickly branched, and are generally aligned a single plain. Like the Colorful Sea Whip, they display a variety of colors ranging from red and orange to reddish purple and purple.

References
- Dupont, J.M. 2009. Ledges and Artificial Reefs on the Inner Central West Florida Shelf Dissertation, University of South Florida

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