

## Coral Community Zone

This zone is comprised of areas that, while not considered to be “true” coral reefs (where the primary reef structure is composed of reef building corals), do contain hermatypic coral species at low densities, or are characterized by other coral reef associated organisms, such as the hydrozoan *Millepora* spp. (fire coral), sponges and tropical macroalgae.



**Fig. 6.15.** Multiple reefs and banks in the northwestern Gulf of Mexico harbor significant coral communities, including Stetson Bank, pictured here. Large pinnacles dominated by *Madracis decactis* provide habitat for thousands of fish, including, pictured, creole fish (*Paranthias furcifer*), blackbar soldierfish *Myripristis jacobus*), sergeant majors (*Abudefduf saxatilis*), and graysby (*Cephalopholis cruentatus*). Spiny lobster (*Panulirus argus*) also find refuge amongst the coral formations (Photo credit: FGBNMS/E.L. Hickerson)

Coral communities are found in depth ranges similar to those that contain coral reefs (18–50 m), where other environmental factors have not allowed full development of reef building species to occur. The “Coral Community” includes the “*Millepora*-Sponge” zone described by Rezak et al. (1985), and also includes some other coral associated assemblages. The most distinctive habitat type in this zone is the *Millepora*-sponge community that characterizes the shallowest peaks of the mid-shelf reefs at Stetson and Sonnier Banks (Fig. 6.15). The fire coral, *Millepora*, can account for up to 30% of the benthic cover on the pinnacles of Stetson Bank (Bernhardt 2000). In addition to fire coral, sponges comprise up to an additional 30% of the substrate. The Coral Community zone also includes habitats that are characterized by scattered occurrences of stony corals or fire coral at relatively low densities. This habitat, called the low-density coral habitat, also includes a mix of other components including

leafy algae, coralline algae, and sponges (Fig. 6.16). Habitats within the Coral Community can also be characterized by algae or sponges when they dominate a particular area, although small percentages of coral species also occur.



**Fig. 6.16.** Geyer Bank is an example of a coral community dominated by the *Millepora* /sponge habitat type. *Millepora alcicornis* (firecoral), sponges (*Xestospongia muta* and an unidentified species) and leafy algae (*Sargassum* sp. and *Lobophora*) dominate the landscape in this image. This type of habitat supports high numbers of an assortment of reef fish, including reef butterflyfish (*Chaetodon sedentarius*), spanish hogfish (*Bodianus rufus*), bluehead wrasse (*Thalassoma bifasciatum*), sunshinefish (*Chromis insolata*), bicolor damselfish (*Stegastes partitus*), rock beauty (*Holacanthus tricolor*), yellowtail reeffish (*Chromis enchrysurus*), and cherubfish (*Centropyge argi*) (Photo credit: FGBNMS/G.P. Schmahl)

## References

Bernhardt SP (2000). Photographic monitoring of benthic biota at Stetson Bank, Gulf of Mexico. Thesis, Texas A&M University, College Station, TX, 73 pp.