



FIGURE 15.53. Coral reefs. (A) An aerial photograph showing fore-reef rubble in the lower portion of the photograph, and reef front comprising spur and groove morphology in the central part of the photograph, with the reef crest and white rubble of the reef flat at the top. Spurs are ~ 100 m long. Courtesy of Bob Ginsburg. (B) A shallow portion of a spur near the reef crest. Moose horn coral (*Acropora palmatta*) provides shelter for a school of fish. Various sea fans and calcified hydrozoans (so-called "fire coral") comprise most of the spur wall beneath the *Acropora*. (C) A close-up of the spur. Most of the reef surface is the globose common star coral *Asterias*. However, note the sea anemone living in the cavity in the reef (arrow) and the bare patches where corals have been killed. Width of field ~ 1 m. (D) Clown parrotfish in a cave in the side of a spur. This fish uses its beak-like jaws to crop the coral rock, contributing coral sand to the reef-filling sediment. (E) Branching stag-horn coral (*Acropora cervicornis*) just below the reef crest. Courtesy of Bob Ginsburg. (F) Large wave ripples and detached blocks of coral at the deep end of a groove. The barracuda is ~ 1.5 m long.