CORAL REEF ECOLOGY
Suggested/Possible Paper Topics


Coral bleaching; the effects of high temperatures, pollution or other stresses on reef forming corals

The contributions of non corals to coral reef formations, *e.g.* coralline algae

The effect of major storms on coral reef communities. Diurnal plankton migrations.

Color pattern adaptations in fish - *e.g.*: diurnal changes, juvenile-to-adult changes, differences between the sexes, why bright colors are adaptive

Sex changes among reef fishes - *e.g.*: groupers, anemone fish, parrotfishes, wrasses (*Labroides dimidiatus*), etc.

The positive and negative effects of studying confined dolphins in coral reef communities

The behavior of:
- stonefish, angling frogfish, reef sharks, octopuses, or hermit crabs
- predatory snails (cone shells, oyster drills, triton trumpets, *etc.*)
- feeding in some reef organism - *e.g.*, starfish
- aggressive corals and succession in a coral community
- schooling fishes
- territorial reef organisms such as damselfish, triggerfish and barracuda
- pipefishes and seahorses with respect to their reproductive processes
- organisms utilizing toxins such as sea wasps, cone snails, sea urchins, and scorpionfishes

Symbiotic associations such as:
- corals (or sponges or bivalves) and zooxanthellae (photo synthesizers)
- anemones and anemone fish (clownfish) or anemone shrimps or crabs
- decorator crabs and hermit crabs and their decorations
- blind shrimps and gobies
- sea cucumbers and pearlfish
- cleaning stations and cleaner organisms
- jellyfishes and various symbionts
- sharks/rays and pilotfish/remoras

Misc.: bioluminescence, flying fishes, nudibranchs, Christmas tree worms (*Spirobranchus gigantgeous*), crab galls, reef parasites (isopods), the diversity of sea stars, right-eyed vs. left-eyed flounders, etc.

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