

Station Location and Descriptions

Lanai

Station PUUPEH. Pu'u Pehe Reconnaissance and Transects. 02-Apr-07. (Latitude 20°44'01.7", Longitude 156°53'26.5"). Depth 8-11 m. Visibility excellent, ca 20-30 m. Reef of medium relief along lee side of Pu'u Pehe Islet with abundant coral cover of ca. 30-50% on consolidated limestone with intermittent sand and rubble. Reef is bordered to east by wall extending from the islet that rises abruptly from 8 m depth and has many ledges and some caves with abundant sponges and occasional hydroids.

Station CATHED. Cathedrals, Near Pu'u Pehe. 04-Apr-07. (Latitude 20°43'57.9", Longitude 156°53'18.1"). Depth 17-18 m. Visibility excellent, ca 20-30 m. In and around large cavern formed by lava tube open at both ends with "rose window" providing light from above. Abundant cup corals (*Tubastrea coccinea*) and diverse sponges on cavern roof. Two areas of growth introduced *Carijoa riisei* growing on side of reef along channel northeast of main cavern entrance.

Station POOPOO. Po'o Po'o Reconnaissance and Transects. 03-Apr-07 (Latitude 20°44'06.9", Longitude 156°55'20.3"). Depth 8-13 m. Visibility good (ca. 1-20 m). Reef with low coral cover and abundant algae along west side of wall extending south of Po'o Po'o Islet. Limestone substratum is coated with sand and silt and has abundant boulders and cobbles with ca. 5% coral cover, virtually all small colonies of *Porites lobata* and *Pocillopora meandrina*. The sponge *Spirastella vagabunda* is common in sandy areas. The vertical wall to the east supports moderate (10-20%) coral cover, increasing to ca 30% going seaward, and some sponges. Sand coverage increases on flat going seaward.

Station POOPIN. Po'o Po'o Pinnacle. 03-Apr-07. (Latitude 20°44'01.7", Longitude 156°55'24.5"). Depth 4-18 m. Steep Pinnacle rising out of 20 m depth with high coral cover of ca. 60% and areas of abundant black hydroid *Lytocarpia niger*, two areas of abundant *Carijoa riisei*, and many Crown of Thorns starfish *Acanthaster planci*.

Maui

Station KAEMI. Kaemi Reconnaissance and Transects. 29-May-07. (Latitude 20°58'49.1", Longitude 156°31'32.4"). Depth 6-12 m. Visibility excellent, ca 20-30 m. Low relief reef on northeast side of Kaemi Islet. Bottom strewn with abundant boulders among intermittent sand patches, area obviously heavily impacted by North Pacific swells. Coral cover low at ca. 5%, abundant algae especially Sargassum sp. and red calcareous forms. Wall of islet to west rises steeply to the surface and supports abundant *Sinularia* sp., *Carijoa riisei* and *Pennaria disticha*. The lacy bryozoan *Reteporellina denticulata* becomes abundant on flat bottom area near end of survey at ca. 12 m.

Station HULU. Hulu Reconnaissance and Transects 30 May-07. (Latitude 20°57'26.6", Longitude 156°31'00.9"). Depth 6-15 m. Visibility excellent, ca 20-30 m. High relief bottom with abundant basalt boulders and modest 5-10% coral cover heavily impacted by North Pacific swells. Rock sizes range from large boulders to cobbles with little sand present on the bottom. *Pocillopora meandrina* abundant in small size classes up to 5-10 cm diameter, algae common especially Sargassum and Dictyopteris.

Station MOLOKI. Outer Molokini Rim Reconnaissance and Transects. 31 May-07. (Latitude 20°37'15.0", Longitude 156°29'36.0"). Depth 4-28 m. Visibility excellent, ca 30 m. Southeast side of outer Molokini Rim. Sheer basalt wall with narrow shelf at ca 15 m, then dropping to >60 m. Coral abundant (>50%) especially colonies of *Pocillopora meandrina* on cliff face and on cobble size rocks on shelf. Highly diverse invertebrate fauna, macroalgae rare.

O'ahu

Station KAOHAI. Kaohaikipu Reconnaissance and Transects 7-Aug-07. (Latitude 21°19'10.1", Longitude 157°39'14.8"). Depth 8-12 m, visibility good, but high ground surge and moderate wave action. On leeward side of Kaohaikipu Islet along basal bench bordered by ledges and boulder and cobble strewn depressions. Coral cover diverse and coverage moderate, ca. 20 species and 15% cover. Abundant and diverse fish, very little macroalgae

Station KAPAPA. Kapapa Reconnaissance and Transects 30-Aug-07. (Latitude 21°28'48.6", Longitude 157°47'32.9"). Depth 8-9 m Reef zone outside of Kapapa Island with very gradual slope and generally low relief except for linear ridges formed primarily by dead and live *Pavona duerdeni*. Coral cover abundant dominated by encrusting *Montipora flabellata*, *M. patula* and *M. capitata*, and encrusting and lobate *Porites lobata* and *P. evermanni*, with occasional *Pocillopora meandrina*. A single very large *Pocillopora eydouxi* of >1 m diameter was observed. Total coral cover was estimated at >50%. A large variety of macroalgae was also present. The coral cover is surprisingly high given that the site is highly wave disturbed and water conditions are usually quite turbid, with lateral visibility at the time of the survey < 10 m.

Moloka'i

Station MOKAPU. Mōkapu Reconnaissance and Transects 18-Sep-07. (Latitude 21°11'00.8", Longitude 156°55'28.9"). Depth 13-22 m. Steep cliff on western/leeward side of Mōkapu Islet. Basalt substratum with moderate coral cover of ca. 15% dominated by *Pocillopora molokensis* and moderate coverage (ca. 10%) of red sponge *Clathria* sp.

Station OKALA. Okala Reconnaissance and Transects 19-Sep-07. (Latitude 21°10'28.1", Longitude 156°55'48.3"). Depth 14-19 m. Steep cliff on western side of Okala Islet similar in wave and wind exposure to Mōkapu site, but very different in benthic biotic composition. At the western end of islet the dominant feature is a large cave extending through the islet that has abundant red cup coral *Tubastrea concinna* and very abundant introduced and invasive snowflake coral *Carijoa* aff. *riisei*. The basalt substratum east of the cave is dominated by a very high coverage (ca 75%) of the soft coral *Sinularia abrubta* and lesser amounts of the zoanthid *Palythoa caesia*. Because of the high cover of these two species hard corals are in low abundance and are mostly *Pocillopora molokensis*.

Station NAMOKU. Namoku Reconnaissance and Transects 20-Sep-07. (Latitude 21°12'26.2", Longitude 156°59'02.2"). Depth 11-22 m. Western side of mostly submerged Namoku Islet, near Kaulapapa Harbor. Most of the area around the islet is a flat basalt bench with thin limestone veneer and many cracks supporting moderate hard coral cover of ca. 15%. Outside of this zone are numerous channels down to 22 m. with large basalt boulders supporting a sparse cover of corals, mostly *Pocillopora molokensis* and *P. meandrina*.