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Peter Craig, Pepper Trail, George Balazs, and Gilbert S. Grant spent 4 nights on Rose Island, Rose Atoll. Specific tasks while on the island were: oil/boat debris assessment on beaches and animals, turtle tagging, rat trapping, vegetation studies, seabird censuses and phenology, and introduced plant eradication. An additional team headed by Beth Flint, operated from the Manu'atele, was charged with damage assessment resulting from the oil spilled from the grounded longliner (separate report).

Oil/boat debris on Rose Island: During beach surveys we encountered no evidence of oil on the shoreline of Rose Island. However, many small pieces of styrafoam and fresh food bottles were present. No signs of oil were detected on the external surfaces of the green turtles that came ashore to nest. A freshly-dead, oiled Red-tailed Tropicbird was collected by Beth Flint. We saw no other seabirds or eggs with oil. Peter Craig estimated that up to 70 % of the coral was bleached in shallow water (1-5 feet deep) off the southwestern shore of Rose Island (within the lagoon).

Turtle tagging: During the four nights (2-6 Nov. 1993) on Rose, 7 green turtles came up to lay eggs. All were flipper tagged and three were additionally tagged with satellite transmitters. Forty-four turtle scrapes were found on Sand Island. Prior to this visit (i.e. 17 Oct. 1993 to 2 Nov. 1993) seven turtle crawls with only three pits occurred.

Rat trapping: Live traps baited with coconut and peanut butter were placed on the existing grid system and checked and reset daily. A total of 271 trap-nights yielded 36 crabs, 2 tern chicks (released unharmed), and 13 were found sprung but empty. Thus 220 trap-nights were available for rats. We did not catch any rats nor see any signs of rats. In addition, we replenished the bait station tubes with 2.18 kg of weatherblock (maximum of 4 blocks per tube).

Vegetation studies: The vegetaion on Rose Island has rebounded at an astonishing rate, probably due primarily to our success in eradicating rats. Twenty-five vegetation sampling plots were established in 1990. Many of these were subsequently destroyed when the island's shape was modified by the recent hurricane (Dec. 1991). We quantified vegetation and ground cover at 15 of these plots. A new seedling of Ipomea pes-caprae was discovered and the woody seedling on the south beach near #95 post (discovered 17 Oct. 1993) is still alive. The Hibiscus discovered in June 1992 is now over 3 m tall and is in flower. Seeds discovered on the beach (potential new colonists) include 2 Barringtonia asiatica, 1 Callophylum inophyllum, 1 Hernandia sonora, and 2 unidentified seeds (sent to USF&WS for ID). One lone coconut is barely alive on Sand Island (no other vegetation here).

Seabird studies: Approximately 19,480 Sooty Tern nests and many eggs of White Tern, Black Noddy, and Brown Noddy were found on Rose Island. The nesting season of tropicbirds, frigatebirds, and boobies was almost completed as few older chicks of these species were found. Details of numbers and stages of development are on the data sheets. On Sand Island, we found 76 Brown Noddies (19 eggs, 4 chicks) and we saw 5 non-nesting Gray-backed Terns.

Introduced plant eradication: A grass and sandspur (Cenchrus sp) found on the 17 October 1993 visit were undoubtedly transported to Rose by humans. We attempted to remove all vegetative structures and as many of the seeds of these as possible. Additional eradication work here is clearly needed.

cc Ken McDermond, USF&WS