

Rose Atoll National Wildlife Refuge / Marine National Monument

December 2-8, 2015 Trip Report

Six participants travelled aboard the chartered vessel Double Barrel and visited Rose Atoll from December 2-8, 2015 under permit # 12514-2015-003: Brian Peck (USFWS), T. Todd Jones (NOAA Fisheries Science Center), Shawn Murakawa (NOAA Fisheries Science Center), Mark McDonald (DMWR), Ricky Misa'alefua (NPS), and Mua Utuga (NPS). We camped on the south shore of Rose Island as the previous camp location to the SW had been eroded and coral rubble shifted to make it



unsuitable. The new camp area was selected based on the lack of nesting birds and recent turtle activity.

The focus of this trip was to attach 8 satellite tags to nesting green sea turtles. Other objectives included seabird monitoring, marine debris removal, qualitative coral bleaching survey, and coconut control.



Green sea turtles: This is the fifth consecutive year that this work has been conducted in collaboration with the NOAA Science Center Marine Turtle Biology & Assessment Program, USFWS, and DMWR. Eight satellite tags were attached to nesting turtles. A total of 12 individual turtles were encountered over six nights, and 10 of these were tagged with flipper and PIT tags. Eggs were counted on 10 turtles with over 1,000 total eggs laid. Detailed information regarding this effort will be provided by NOAA.



Two surveys were conducted for turtle presence within the lagoon. Several individuals were encountered, including a mating pair in the SE corner of the lagoon.

Approximately 9 hatchlings were encountered trying to access the lagoon near the camp area. Crabs were eating two individuals, the rest made it to the water.

Seabird surveys: Mark McDonald and myself conducted these surveys in the mornings between 7:00 and 10:30 am on December 4, 5, and 6th. General observations included: numerous black noddies nesting at all stages, late stages of brown noddies nesting with little activity, frigatebird chicks present, and numerous red footed booby chicks from downy to fledged. Data will be downloaded from the Trimble unit and analyzed.

In addition, the following shorebirds and other birds were observed: reef heron, wandering tattler, pacific golden plover, ruddy turnstone, long billed cuckoo, and a petrel. The unidentified petrel was seen by Mark McDonald flying overhead towards the island while standing on the beach on the south shore.



Marine Debris and Trespass: Approximately 4 garbage bags of trash were collected over the course of the trip. The amount of trash present along the beach strand was much less than in October. Some trash from the interior of the island was collected, including some of the leftover PVC pipes used for rat poison and PVC pipe used for survey stakes. Some of this had previously been piled up under a Pisonia tree. A FAD float was collected from Sand Island. A large rope approximately 3" diameter and 30' long was collected from the west shore of Rose Island.



Evidence of trespass was detected. This consisted of a concrete cinder block on the sand flat on the NW corner of Rose Island. Directly onshore from this location, a woman's bikini top was found tied to a Tournefortia shrub. Most likely the cinder block was used as an anchor for a dinghy from a yacht or a small boat that had entered into the lagoon.

In addition, a balled up length of monofilament fishing line (approximately 15 lb test) was found on a coral head close to the south shore of Rose Island.

Coral Bleaching: Snorkel surveys were conducted at various points in the lagoon both at the pinnacles and reef flats. Some bleaching was present, approximately at the same level as October 2015. It appeared most corals were recovering from a past bleaching event, it didn't appear fresh.



Coconut Control: Coconuts were cut down by machete on December 4, 6, and 7th. A total of 712 small trees and 7 medium trees (without nuts) were cut down. Several patches of small trees were left as tropicbird nests or juveniles were present. All large trees were left standing.

Miscellaneous Observations:

- 1) A large flock of birds was observed feeding approximately ½ mile offshore as we left the atoll on December 8, most likely over a school of tuna.
- 2) Several small pieces of basalt rocks were found at various locations on the beach at Rose Island. A large two foot long smooth piece of basalt was found about 200' inland on Rose Island. I called David Herdrich, ASG Archaeologist, via satellite phone. He said that he knew about this artifact and it will be included in his report which is due within the month.
- 3) Several blacktip reef sharks were observed inside of the lagoon. Two gray reef sharks were observed at the outside edge of the ava.
- 4) Four Pisonia trees were located, two large trees with dead tops and two younger trees, approximately 25' high. All trees had new growth and had scale insects present but not overwhelming. Small patches of rot were



located at the pesticide injection sites on the two large trees. This may be a source of disease introduction for these trees.

Presentation: On December 10, back in Pago Pago, I coordinated and T. Todd Jones presented preliminary results of turtle tracking to date. Approximately 25 people attended along with KVZK TV, who conducted an interview beforehand.

Other: T. Todd Jones will be adding me to his turtle permits in order to allow me to conduct tagging on my future trips. He left a kit of tagging supplies. If trip logistics allow, I will be flipper and PIT tagging turtles, counting eggs, and taking carapace measurements.

Summary written by Brian Peck , USFWS Rose Atoll manager 12-18-15. All photos by Brian Peck.

