Maps and Aerial Oblique Photographs of the Northern Islands of the

Commonwealth of the Northern Mariana Islands.

All photographs by Curt Kessler, U.S. Fish and Wildlife Service, 2010. Captions by Fred Amidon.

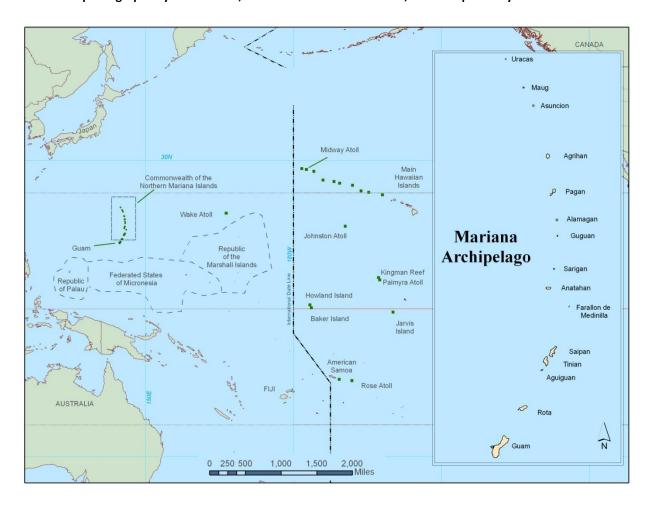


Figure 1. The location and composition of the Mariana archipelago.

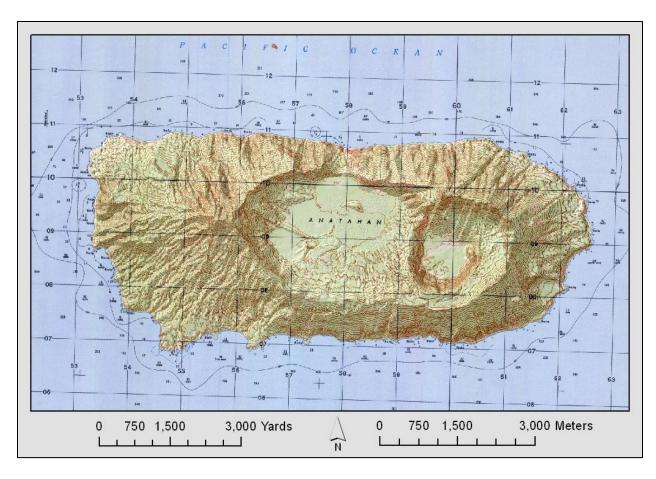


Figure 2. Island of Anatahan, Commonwealth of the Northern Mariana Islands.



Figure 3. Southern side of the island of Anatahan, Commonwealth of the Northern Mariana Islands, 2010.



Figure 4. Crater on Anatahan, 2010.



Figure 5. Upper slope of the south side of the Anatahan crater, 2010.



Figure 6. Ravine with remnant forest and ridge with recent re-vegetation on Anatahan, 2010.



Figure 7. Barren ridge tops along Anatahan crater, 2010.



Figure 8. Southwest corner of Anatahan looking east, 2010.

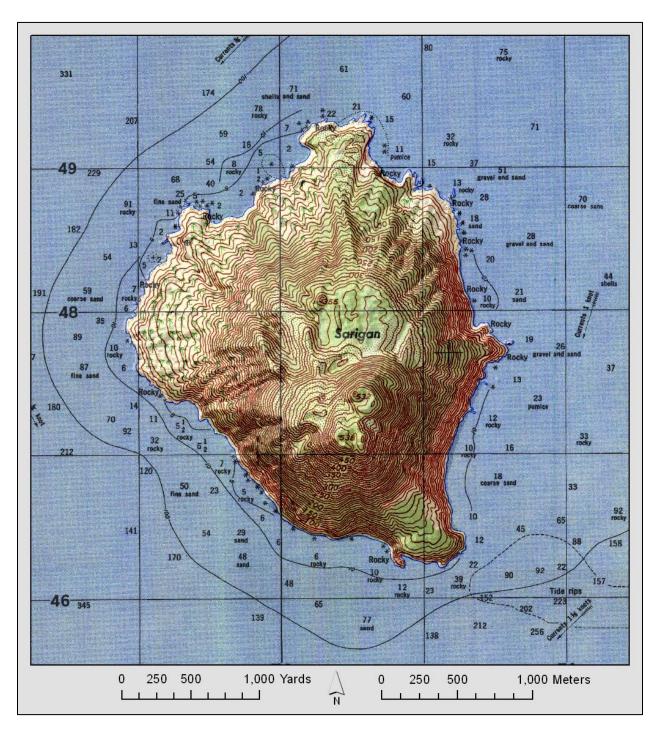


Figure 9. Island of Sarigan, Commonwealth of the Northern Mariana Islands.

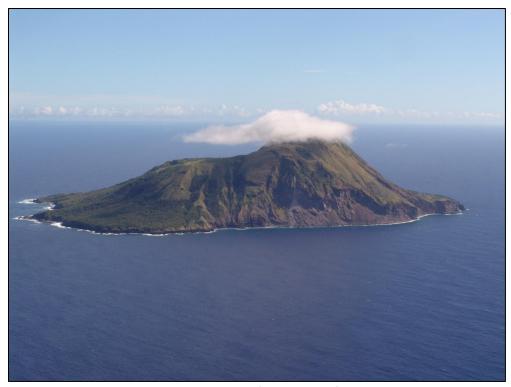


Figure 10. Southwest side of the island of Sarigan, 2010.



Figure 11. Forested areas on the northwest side of Sarigan, 2010.

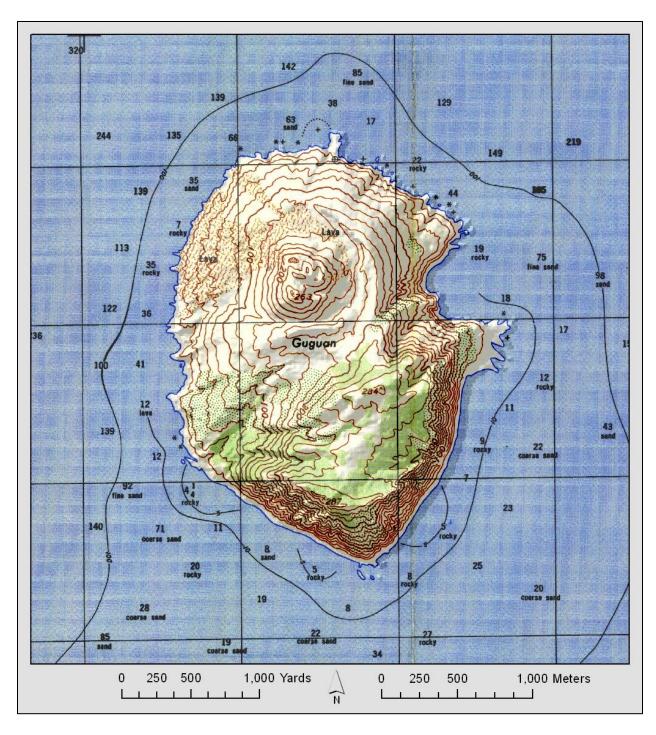


Figure 12. Island of Guguan, Commonwealth of the Northern Mariana Islands.



Figure 13. Southern end of the island of Guguan with the island of Alamagan on the horizon, 2010.



Figure 14. Western side of Guguan, 2010.



Figure 15. Rugged coastline along the western coast of Guguan, 2010.



Figure 16. Volcanic region on the northern end of Guguan, 2010.



Figure 17. Forested slopes around the southern side of Guguan, 2010.

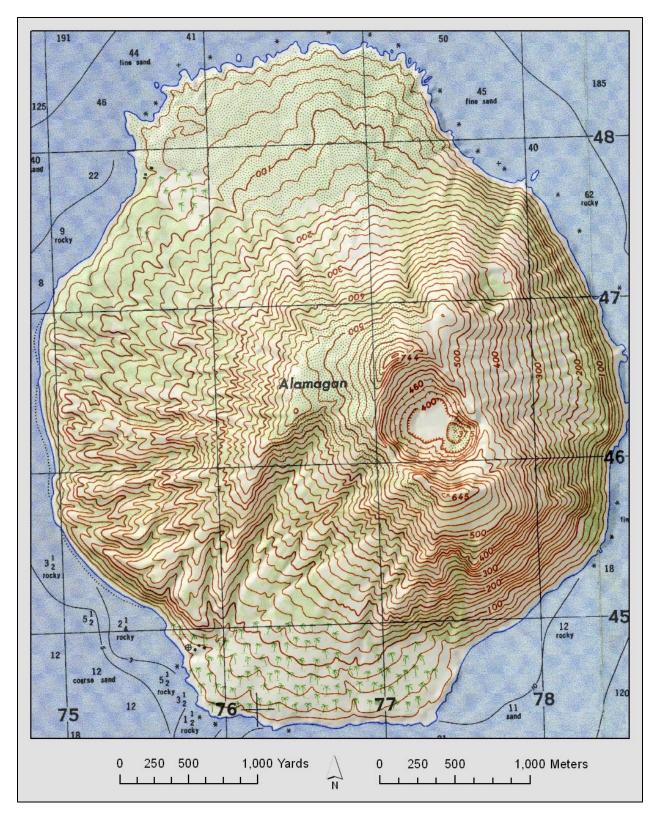


Figure 18. Island of Alamagan, Commonwealth of the Northern Mariana Islands.



Figure 19. Western side of the island of Alamagan, 2010.



Figure 20. Remnant ravine forest on the island of Alamagan, 2010.

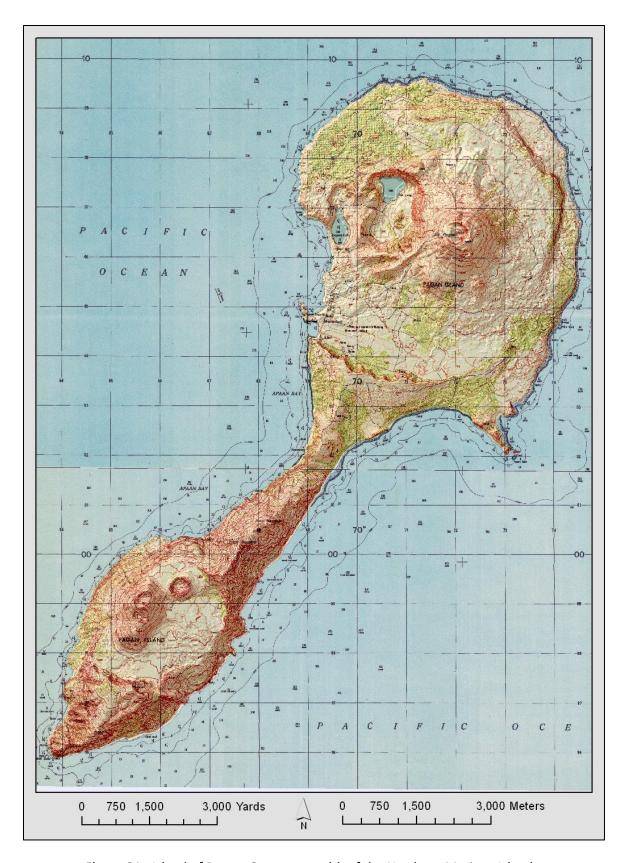


Figure 21. Island of Pagan, Commonwealth of the Northern Mariana Islands.



Figure 22. Eastern side of the island of Pagan with the southern half of the island in the foreground and the northern end in the background, 2010. Note smoking volcanic peak on the northern end of the island.



Figure 23. Eastern coastline of the southern end of Pagan, 2010.



Figure 24. Old Japanese runway on the northern end of Pagan, 2010. Note ironwood monoculture along the slopes of the volcanic peak.



Figure 25. Heavily grazed area on the isthmus of Pagan, 2010. Note cattle path in front of the coconut forest.

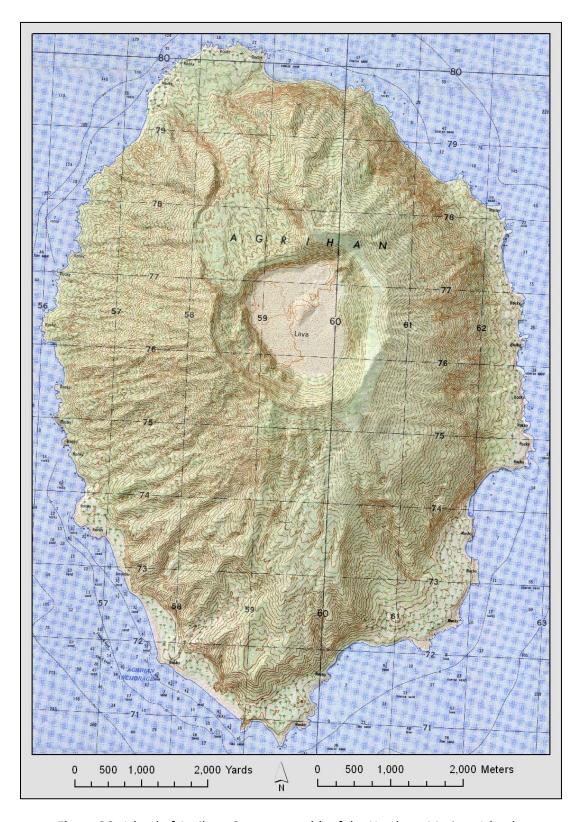


Figure 26. Island of Agrihan, Commonwealth of the Northern Mariana Islands.



Figure 27. Western side of the island of Agrihan, 2010.



Figure 28. Coconut forests on the southern coast of Agrihan, 2010.



Figure 29. Steep ravines on the western side of Agrihan, 2010. Note tangantangan thicket on top of cliff.



Figure 30. Coconut forest at the base of an old lava flow on the northern side of Agrihan, 2010.



Figure 31. View of the volcanic crater on Agrihan, 2010. Note steam vent.

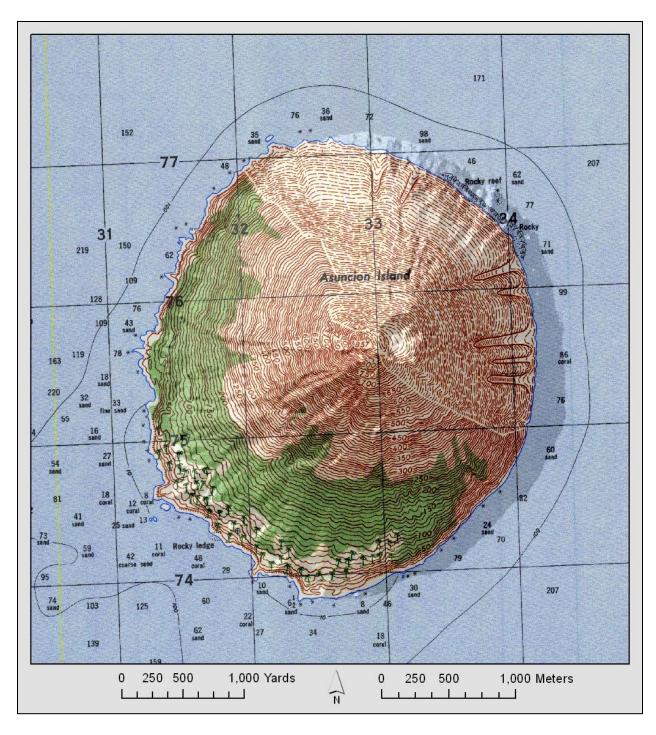


Figure 32. Island of Asuncion, Commonwealth of the Northern Mariana Islands.

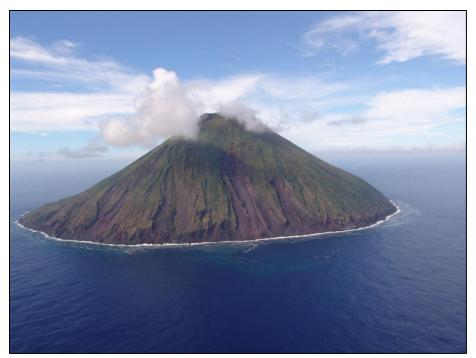


Figure 33. Steep eastern slope of the volcanic peak on Asuncion, 2010.



Figure 34. Forested western slope of the volcanic peark on Asuncion, 2010.



Figure 35. Western coastline of the island of Asuncion, 2010. Note coconut forests in the foreground.



Figure 36. View of volcanic crater on the peak of Asuncion, 2010.

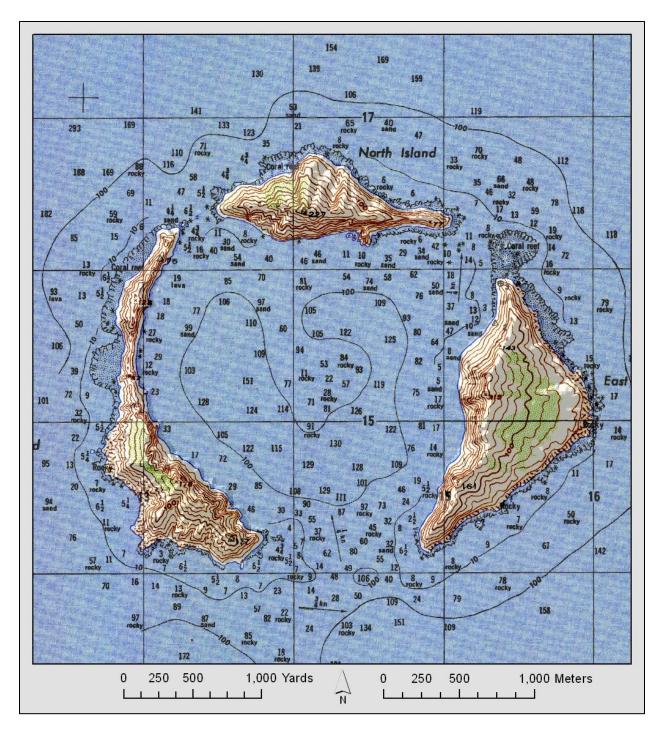


Figure 37. Island of Maug, Commonwealth of the Northern Mariana Islands.



Figure 38. Islets of Maug with eastern Maug in the foreground and northern (right side of the picture) and western Maug in the background, 2010.



Figure 39. Japanese era weather station located on the eastern islet of Maug, 2010.



Figure 40. Forest on the eastern islet of Maug, 2010. Note large breadfruit trees in the fore and background.

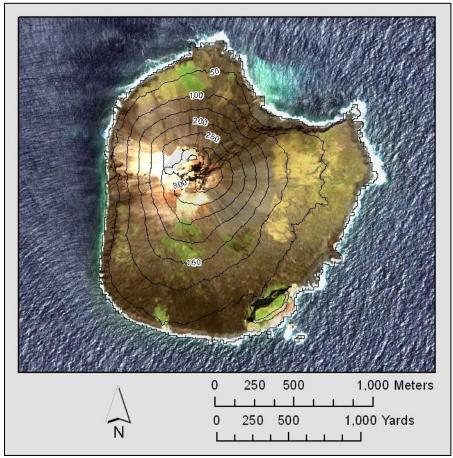


Figure 41. Island of Uracas, Commonwealth of the Northern Mariana Islands.



Figure 42. Southern coast of the island of Uracas, 2010.



Figure 43. Slope of the volcanic peak on Uracas, 2010. Note low ground-cover in the foreground and bare lava flows along slope.

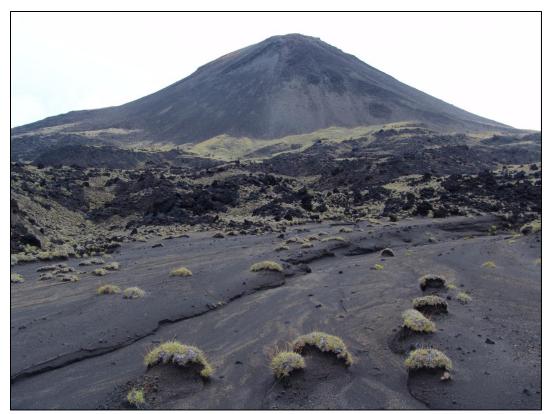


Figure 44. Slope of the volcanic peak on Uracas facing toward the southwest, 2010. Note lack of woody vegetation.



Figure 45. Steep slope on the northwestern side of Uracas, 2010. Note lack of vegetation except along the lower slope near coast.