PRODUCTIVITY AND MOVEMENTS OF NENE IN THE KA'U DESERT, HAWAII VOLCANOES NATIONAL PARK, 1981 - 1982*

C.P. Stone, H. Hoshide, and P.C. Banko Hawaii Volcanoes National Park Hawaii National Park, Hawaii 96718

Eleven nene nests were found in Hawaii Volcanoes National Park in the 1981-1982 breeding season. Eight of these (including one renesting effort and one nest found after nesting season) were located in the Ka'u Desert and three nests were found in the lowlands (elevation 800 m [2625 feet] or less). At least six nesting pairs in the Desert produced 21 eggs, of which nine hatched, and from which two goslings fledged (reached flying age). Three goslings from 10 lowland eggs also fledged. Solar radio transmitters placed on three adult Ka'u Desert ganders near hatching time were used to radiotrack nene families from post-hatching through molt. Two of the three families moved directly to Kapapala Ranch after the eggs hatched (January 11 and February 3) and remained there until molt began (early to late March). Maximum known home range diameters between hatching and molt onset were 5.3 and 6.5 km (3.3 and 4.0 mi). Both families (one without the gander) returned to the Ka'u Desert to undergo feather molt. Maximum known home range diameters during molt were 5.9 and 7.0 km (3.6 and 4.3 mi). The third instrumented gander and family remained in the Ka'u Desert after hatching (March 2), and the three young died at less than four, less than 11, and less than 14 days, after what seemed inadequate growth. The maximum known home range diameter between hatching and onset of molt was 2.5 km (1.5 mi). Both gander and goose began to molt in early April and remained in the Ka'u Desert. Maximum known range diameter during the molting period for this pair was 3.0 km (1.9 mi).

* ABSTRACT