PATTERNS IN THE DISTRIBUTION AND ABUNDANCE OF THE PALILA ON MAUNA KEA

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A recent cooperative survey involving the Hawaii Division of Fish and Game, Hawaii Division of Forestry, U.S. Forest Service, and the U.S. Fish and Wildlife Service resulted in the censusing of the entire known geographical range of the Palila (Psittirostra bailleui).

This area was censused in January 1975 and again in September 1975. During these periods 597 and 586 kilometers of transects were walked and 2,185 and 715 hectares respectively were censused for Palila. These figures comprise 13.6 and 5.3 percent of the total area surveyed.

Palila were found only on the south and southeast flanks of Mauna Kea from 1,890 to 2,866 meters elevation. Estimated densities ranged from 1.83 to 125.73 birds per hundred hectares (median 17.28) during the non-breeding season, and from 2.53 to 88.96 in the breeding season. The Palila population was estimated to be 770 during the non-breeding season and 675 during the breeding season. These two figures are not significantly different from one another.

1Abstract.

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