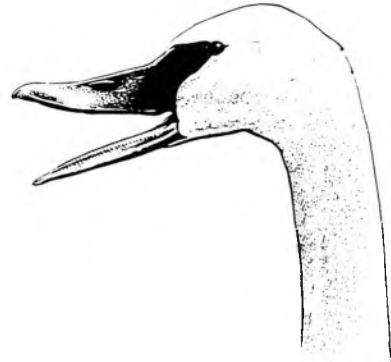


**Demographic analyses of a
Trumpeter Swan *Cygnus cygnus*
buccinator population in
western U.S.A.**



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Trumpeter Swan surveys have been conducted in the northern Rocky Mountain region of the U.S.A. since 1929. Survey timing and methods have varied. Two aerial censuses, in September and February, are currently used to monitor population size, recruitment and distribution of the Rocky Mountain Population, its two subpopulations, and several component flocks. The Tristate Subpopulation increased from 69 trumpeter swans in 1932 to 627 in 1954. It then began to fluctuate widely around a mean of 536 swans. Despite the fluctuations, the slope of the Tristate Subpopulation from 1950 to 1989 is not different than zero. The subpopulation currently numbers 565. Annual fluctuations are due primarily to variations in recruitment rates. Although numbers increased and fluctuated, flock distribution remains relatively stable. In September, Montana contains 65.6%, Idaho 11.4% and Wyoming 23.0% of the Tristate Subpopulation. The Interior Canada Subpopulation has increased from approximately 200 in 1974 to about 1150 in 1989. Most of these migratory swans winter in Idaho. The increase in numbers has resulted in shifts in wintering distribution. Montana hosts more swans and a declining percentage of the total Rocky Mountain Population (35.6%). Idaho winters more swans and an increasing percentage of the total (49.8%). Wyoming numbers have increased, but it continues to winter about the same percentage (12.5%) of the winter population. Shifts are due to overcrowding and/or forage depletion on traditional wintering sites, poor weather conditions, low water levels, varying ice conditions, and differential recruitment by flocks using specific traditional sites. The two seasonal censuses allow close monitoring of demographic patterns, evaluation of management procedures, and formulation of research needs.

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