



2001 SILVERSWORD UPDATE

10 YEAR CENSUS

The Haleakala silversword (*Argyroxiphium sandwicense* ssp. *macrocephalum*), declined markedly in the late 1800's and early 1900's due to browsing by goats and cattle and to vandalism by humans. Protection was provided by the national park and at last count (1991) the silversword numbers had increased to about 60,000 individuals. To monitor silversword populations, all known silverswords are counted every ten years. 2001 is one of those years.

FLOWERING SURVEY

No one knows what triggers the silverswords to flower. Some years (1991) there are many thousands that flower, and other years (1970) there are none that flower. To help determine what triggers the silversword to flower, the flowering silverswords are counted each year. Though still in progress, early results from this year's count suggest an above average number of silverswords flowering, with some of the largest in recent history deciding to flower this year. Normally there is a broad range in the size (live crown diameter) of silverswords that flower (5 - 50 cm). This year however, seems to be dominated by the giants (>20 cm). Some of the most spectacular specimens to be seen in Haleakala crater in years can currently be found on the Sliding Sands trail.

ANNUAL PLOTS

No one truly knows how long silverswords live. Silverswords are monocarpic, they flower once, and then die. Early estimates of silversword life-span was 7-20 years. Data collected from 11 permanent plots monitored since 1982 suggests that silverswords live much longer than that. New estimates are 15-50+ years. Of the hundreds of silverswords monitored, about 1% of the entire silversword population, not a single plant has gone from seed to flower in the last 19 years. In fact, some plants a mere 3 cm in size are 17 years old. Annual monitoring may some day help us determine how long silverswords truly live.