## 2002 ANNUAL SILVERSWORD CENSUS UPDATE Forest & Kim Starr

The 2002 Haleakala silversword census occurred in October. The flowering count total was 1578, the 7th largest flowering year on record. This is the only time there have been two 1000+ years in a row, busting the boom/bust theory. Last year was the 7th largest, now the 8th largest, with 1141 flowering.

The silverswords that flowered this year were on the small/medium size. Last year the silverswords were huge, some taller than us. Steve Anderson mentioned Betsy Gagne recently hiked through the crater and also noticed the silverswords were on the small size this year, she also commented that they were late bloomers this year. We concur, as we occasionally contacted interpretation folks this spring and early summer to ask about the silverswords and during May/June there was very little flowering. The silverswords are normally brown and crispy by the time we census them in October, but the majority of them were in full green vigor and we came across a few that were just beginning to bolt.

In the plots, the death trend continues. This is the first year there was no recruitment (0 seedlings) in the plots, despite a wet winter after a strong flowering year. One plot had one seedling, but we feel this was probably a mapping discrepancy rather than actual germination. The death trend was also visible outside of plot areas. It almost seems like the shrinking/dying trend is like a boat, and that response to changes in environmental trends is delayed. We'll just have to go back next year and find out.

Despite the decrease in numbers of silverswords, there are still tons of them out there (probably 45-50 thousand or so), and the area they cover seems to be increasing, especially on cinder cones where many of the cones are moving towards a continuous band of silverswords, rather than discrete populations.

Mahalo to all who assisted with the 2002 count: Monroe Bryce, Diane Lewis, Ryan Luskin, and Mike Townsend.