

Butterfly Habitat Restoration

Laura Nelson and Terri Thomas, Natural Resource Specialists at Golden Gate NRA, report a pilot study to assess the effectiveness of revegetating coastal grassland and scrub habitat of 2 federally listed endangered species – the Mission Blue and the Blue Elf butterfly. Their habitat has been reduced by urbanization of the San Francisco Bay area and disturbed by introduction of invasive exotic plants. Revegetation efforts in the GGNRA include removal of approximately 100 acres each of fresh broom and pampas grass, using manual pulling and cutting, herbicide, or heavy equipment.

At Milatra Ridge, San Mateo County, 6 experimental seeding and planting treatment plots were established in 1988 following removal of pampas grass by heavy equipment. The plots were monitored in the summers of 1989 and 1991. Treatments included different combinations of hand-broadcast seeding with locally collected natives, hydroseeding with commercial native grasses, and transplanting native seedlings grown in a nursery. To sample the vegetation cover, both point and quadrat methods were used.

The point method gave a more accurate representation of the plant species present. A mix containing seeds collected from native plants in the immediate vicinity, hand broadcast and raked in, resulted in the greatest overall coverage by natives after 2 years, and the least amount of invasion by nonnative forbs. Results of this pilot study will provide park resource managers with preliminary information needed to conduct a 3-year restoration effort leading to long-term management of the community and recovery of the endangered butterflies.