A Winter Shelter

Morro Bay Golf Course provides a winter home to one of the largest populations of wintering monarch butterflies on the Pacific coast.

by TOM MASSEY

EACH FALL, Morro Bay Golf Course (Morro Bay, California) is home to one of nature's most spectacular sights: 25,000 to 30,000 monarch butterflies descending on the golf course to spend the winter in a grove of eucalyptus trees. Located on the central coast of California and having a mild winter climate, our locale is perfect for the butterfly to spend the fall and winter.

The monarch butterfly is one of North America's most familiar butterflies. People readily recognize it by its large size, distinctive orange and black color, and slow, drifting flight. This small creature is a long-distance champion, often traveling thousands of miles as it migrates to wintering sites each fall. While the majority of monarchs spend the winter on a few mountaintop sites in Mexico, vast numbers of monarchs also overwinter along the Pacific coast.

Begun in 1996, our Monarch Butterfly Project is a dedicated effort to enhance habitat for monarchs on the golf course. The project is the natural outgrowth of stewardship efforts begun when we joined the Audubon Cooperative Sanctuary Program (ACSP) in 1992 and achieved full certification in 1995. Spearheaded by our ACSP resource committee, our primary objective is keep keep monarch butterflies returning year after year.

Enhancing the Site

To ensure that we continue to provide ideal conditions for monarchs, our resource committee enlisted the help of Dr. Kingston Leong, an entomologist at California Polytechnic State University in nearby San Luis Obispo, California. Dr. Leong has studied the migration patterns of the monarch butterfly throughout central California for many years and has found only a handful of sites where monarchs stop for the winter. Morro Bay is one of the largest sites he's found to date – some years sheltering as many as 150,000 butterflies.

The butterflies rest in a grove of blue gum eucalyptus trees located in the center of our golf course. Dr. Leong surveyed the site and established grids to designate its boundaries. Because butterflies rely on the sun for warmth and to raise their body temperature in order to fly, we took steps to keep climatic conditions on the site favorable for monarchs. First, we pruned eucalyptus trees on the southern border to increase the amount of sunlight that filters into the site. In addition, we planted a windrow of Monterey cypress trees to protect the site from prevailing northwesterly winds. Equally important, we protect the site by minimizing any golf course maintenance in this area and restricting pesticide use.

So that we may further enhance this habitat, Dr. Leong has applied for grant funds to purchase instruments to record and document weather patterns on site. We're excited by the possibility of generating research data that will further contribute to the conservation of this butterfly species.

Golfer Response

The unique beauty and remarkable number of monarchs on the golf course give rare distinction to the game of golf at Morro Bay during fall and winter months. Golfers love to see the butterflies, and the ladies' club even holds an annual Monarch Butterfly Tournament. I update our conservation efforts to the ACSP resource committee and the green committee, and provide information for them to take back to their respective members.

Perspectives and Recommendations

My advice to others who are considering wildlife enhancement or protection projects is to surround yourself with intelligent, hard-working volunteers, such as a resource committee. These people can provide invaluable information and assistance to turn your ideas and goals into actions and outcomes. Though I initially feared that the monarch project would increase my already full workload, I found that having our ACSP resource committee and the maintenance crew involved made all the difference.

Though efforts to increase or enhance wildlife populations do not produce results overnight, the results are well worth the wait. To watch the population of butterflies increase year after year and to see firsthand that our efforts are paying environmental dividends is most satisfying. Our Monarch Butterfly Project will continue to be a high priority for Morro Bay Golf Course for years to come.

TOM MASSEY *is the golf course superintendent at Morro Bay Golf Course in Morro Bay, California. The course has been certified as an Audubon Cooperative Sanctuary since 1995. To find out more about the Monarch Butterfly Project or other environmental projects at Morro Bay, contact Tom Massey at (805) 772-6390, or e-mail at: tmassey@co.slo.ca.us.*

Each fall, 25,000 to 30,000 monarch butterflies descend on Morro Bay Golf Course (California), where they will spend the winter in this grove of eucalyptus trees. During high population cycles, as many as 150,000 butterflies have been counted on the course.