



Jo-Ann Ordano, © California Academy of Sciences

common name	Yellow Star-thistle
scientific name	<i>Centaurea solstitialis</i>
family	Asteraceae (sunflower)
habitat	disturbed areas, grassland
size	plant up to 2.5 feet tall, flower 5 cm across including spines

description Member of the sunflower family. Each **flowerhead** is actually made up of 20-40 individual yellow flowers. The spines on the sepals may still be sharp long after the plant is dead. The Yellow Star-thistle plant is silvery-green when young and gray-green later in the season. Yellow Star-thistle is not easily confused with any other species at Mather Field.

life cycle Yellow Star-thistle is an annual. It germinates in the late winter. In the beginning, it puts most of its energy into growing a very long **taproot**. Later, as most of the grassland begins to dry and turn brown, the Yellow Star-thistle grows quickly. The long taproot allows it to find moisture still remaining in the soil below the shallow grass roots. Yellow Star-thistle begins to bloom in May. It can bloom throughout the summer and fall.

ecology Yellow Star-thistle is non-native and considered **invasive** because it competes with native species. It is particularly suited to occupy recently disturbed areas where it quickly becomes the **dominant** species. Yellow Star-thistle is so successful here because it uses the deep soil moisture which most native plants and non-native annual grasses cannot reach.

Yellow Star-thistle is insect pollinated. During the late spring and summer when it is in bloom, there are very few native insects. Yellow Star-thistle is pollinated by domestic Honey Bees. If bee keepers were to remove their hives, few Yellow Star-thistle flowers would be pollinated. With reduced pollination, there would be fewer seeds produced.

investigate

Observe where Yellow Star-thistle grows at Mather Field. What are some of the reasons why it might grow there?

