# Merced Vernal Pools and Grassland Reserve

The first University of California Natural Reserve in the San Joaquin Valley

The mission of the UC Natural Reserve System is to contribute to the understanding and wise stewardship of the Earth and its natural systems by supporting university level teaching, research, and public service at protected natural areas throughout California.

This Reserve consists of 6,561 acres of protected land and encompasses the most extensive vernal pool landscape that remains in California. It provides a habitat for many threatened and endangered plants and animals. The Reserve is an immense natural environment for faculty and students to conduct research and it is ideal for class field trips and a wide variety of education and teaching.

The Reserve is open by reservation only. Please contact vernalpools.ucmerced.edu

Lake

Yosemite

Bellevue Road

You

Are

Here

California, Merced

Legend

 $-\times-\times-\times$  Fence

---- Dirt Road

**Stock Ponds** 

**Public Road** 

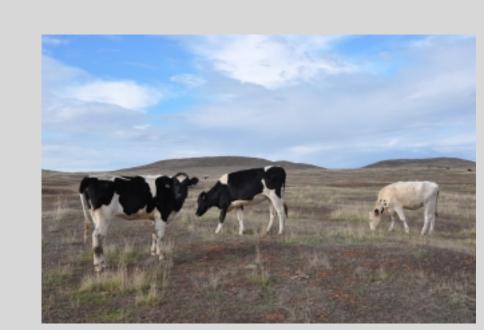
Windmill

Canal / Stream

Vernal Pools / Wetlands



The Reserve is home to four species of fairy shrimp, a tadpole shrimp, and a clam shrimp. Three species are on the federal endangered species list. Fairy shrimp are endemic to vernal pools, ephemeral wetlands that lack fish.



## Cow

Cows are a necessary management tool on the Reserve. Grazing keeps non-native grass populations in check, thereby ensuring the health of the vernal pools and the rare flowers found there.



Merced

Vernal Pools

and Grassland

Reserve

Vernal pools are small, seasonal wetlands that develop in winter and spring when shallow depressions in the grasslands fill with rainwater. These pools occur over a layer of impermeable clay hardpan that prevents water from draining into the soil. Hundreds of pools occur in the Reserve.



#### **Ieadowfoam**

In spring, these beautiful low growing wildflowers create a brilliant white carpet that covers the ground surrounding the vernal pools.



# **Succulent Owl's Clover**

The Reserve is the center of their occurrence in California! Although these flowers are photosynthetic, they obtain minerals and water by attaching their roots to those of neighboring plants.



## California Tiger Salamander

Tiger Salamanders depend on vernal pools and cattle stock ponds for breeding and egg laying inwinter and early spring. The rest of the year they reside beneath the ground in ground squirrel burrows, gopher holes and in cracks in the soil.



La Grande Canal

These unusual owls require ground squirrel burrows for nesting and shelter. The owls can often be seen standing in the open on the ground during the day. Once common, populations have declined throughout the California and this owl is now being considered for endangered species status.

