



Western Dog Violet & Myrtle's Silverspot Butterfly



Updated May 2019



Project Details

- Project Details
 - Using Calflora mobile application identify the location and abundance of *Viola adunca* on the coastal prairies of Sonoma Coast SP. 1x in March, 2x in April, 2x in May, 1x in June=6 surveys in 4 areas
- Why?
 - *Viola adunca* has been identified as the host plant for the federally endangered Myrtle's Silverspot Butterfly
- What will NRM staff do with this information?
 - Designate future transect locations to survey for the butterflies
 - Determine locations for conservation efforts
 - Salt Point coastal prairie restoration grant from US Fish & Wildlife from the *Viola* data collected in 2017

Myrtle's Silverspot Butterfly



7/19/2017 Red Hill Photos by Hailey Laskey

Myrtle's Silverspot Natural History

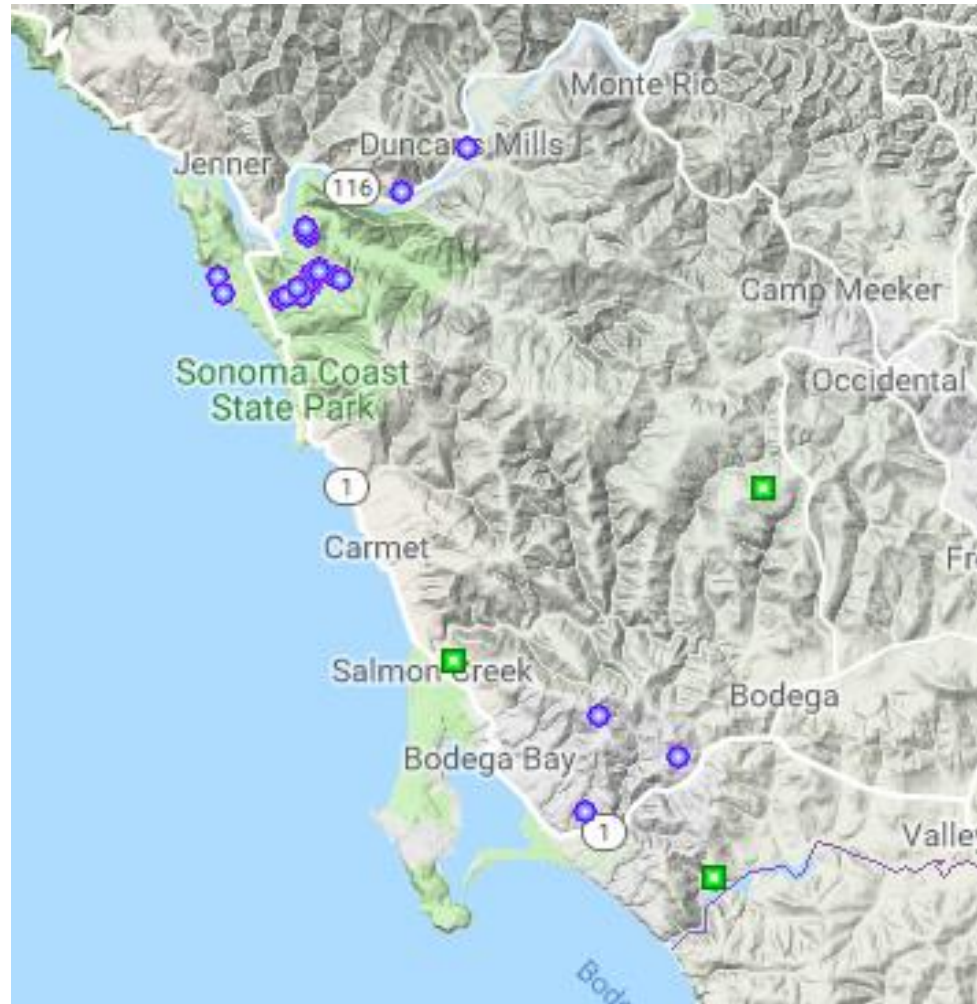
- Adult Female butterflies lay their eggs on the dried leaves of *Viola adunca*, making it the larval host plant
- Once the larvae hatch, they spin a silk pad where they lay dormant for fall and winter (diapause) on *Viola leaves*
- During spring and summer they go through 5 different stages (instars) of development before forming a pupa within a chamber of leaves (2 weeks)
- They live as adults for 3 weeks between July and early September
- They are active late mornings when temperatures are above 60 degrees Fahrenheit, light wind
- Observed at SCSP Summer 2017
 - 2 at Redhill(July). Incidental Observation
- Historic Range Sonoma to San Mateo Counties

Viola adunca Natural History

- Blooms from March to August
- Deep purple, light purple
- Seeds are viable for 100 years
- Not a good competitor
- Relies on periodic disturbance, example: easily found along trails
- 5 petals, very small



Cal Flora Viola Data

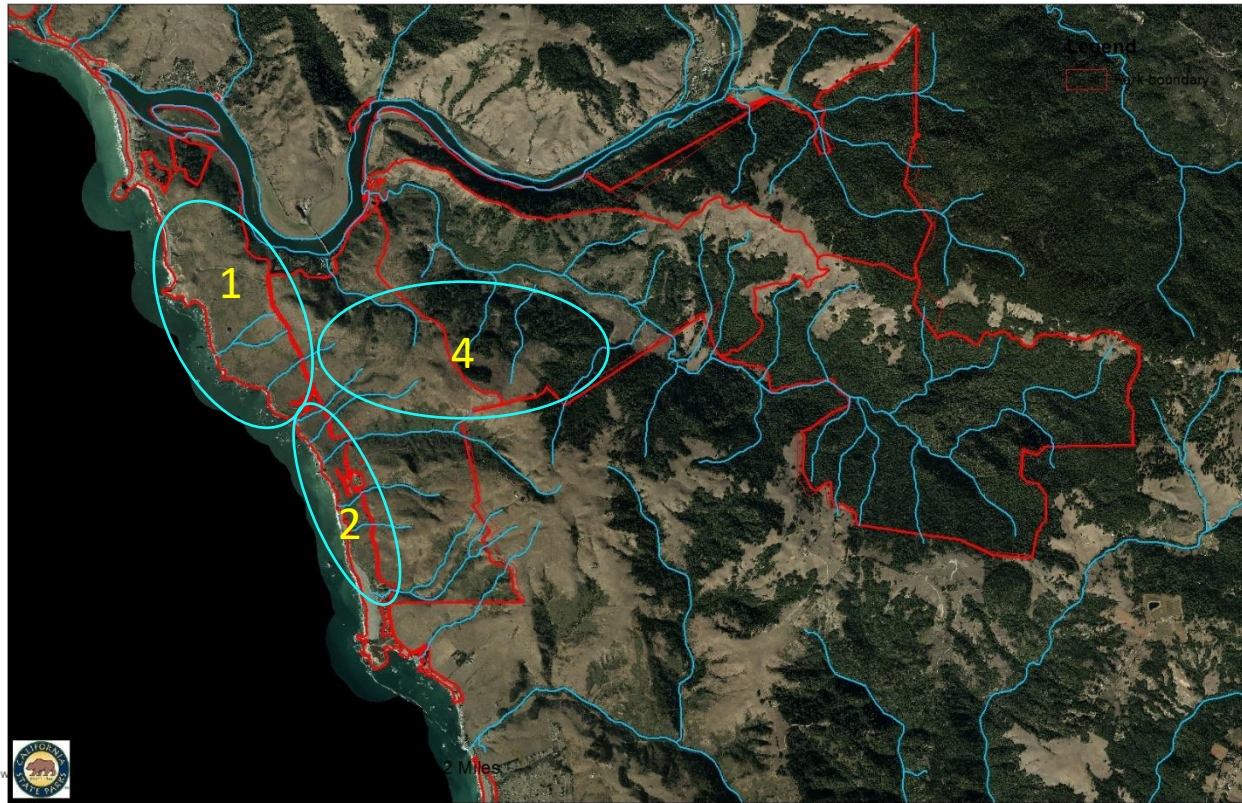


Survey Strategy

Viola adunca is a small plant, look for a pop of violet in disturbed areas like

- Rocky outcrops
- Along the trail under other plants
- Near the bluff edge
- Mowed areas

Area Overview



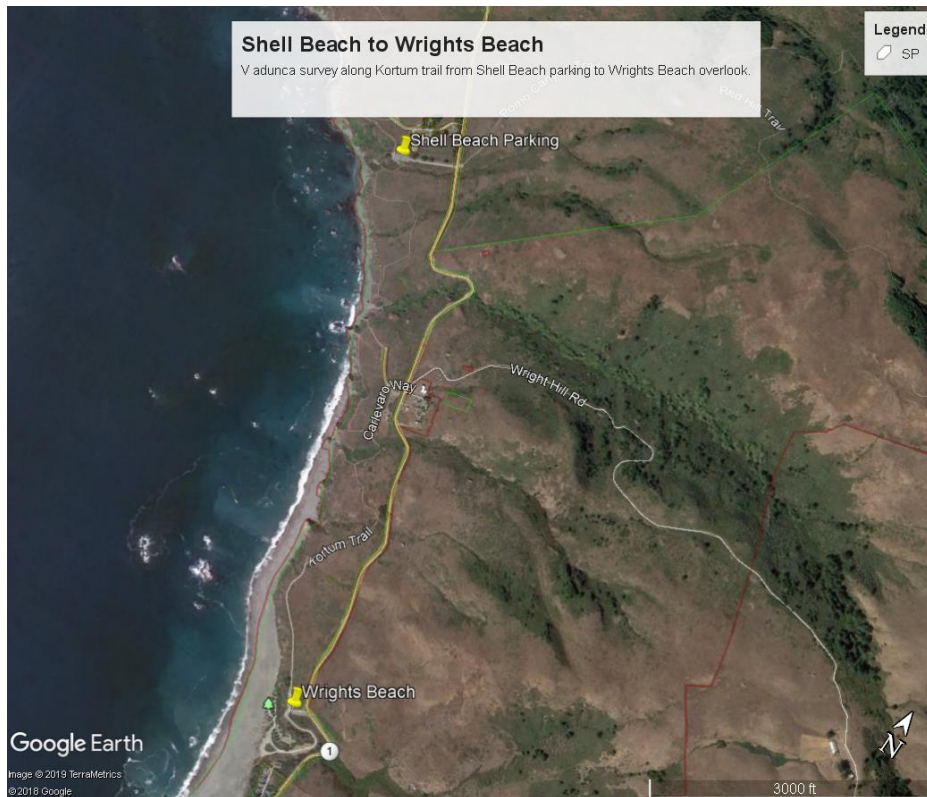
1. Goat Rock to Shell Beach



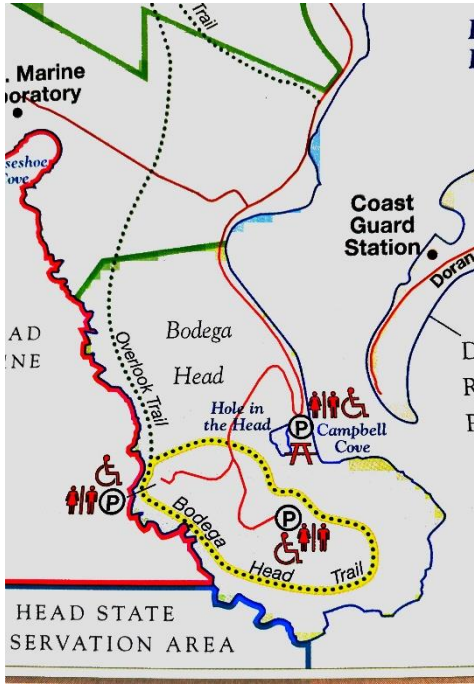
- Blind beach parking lot to Shell Beach parking lot
- Trail Mileage: 1.75 miles one way.
- Strategy
 - Out and back exploration, or work with partner and leave a car at one trailhead and start at the other
 - Start at one end and do an out and back hike or use two cars, leave one at one trail head and start at opposite trail head.

2. Shell Beach to Wright's Beach

- Shell Beach to Wright's Beach
- Trail Mileage: 1.25 miles one way
- Strategy
 - Out and back exploration
 - Drop a car off at one end and start at another
 - Focus time on open grass land area



3. Bodega Head



- Bodega Head
- Trail Mileage: Bodega head trail - 1.75 miles Overlook trail – ½ mile one way

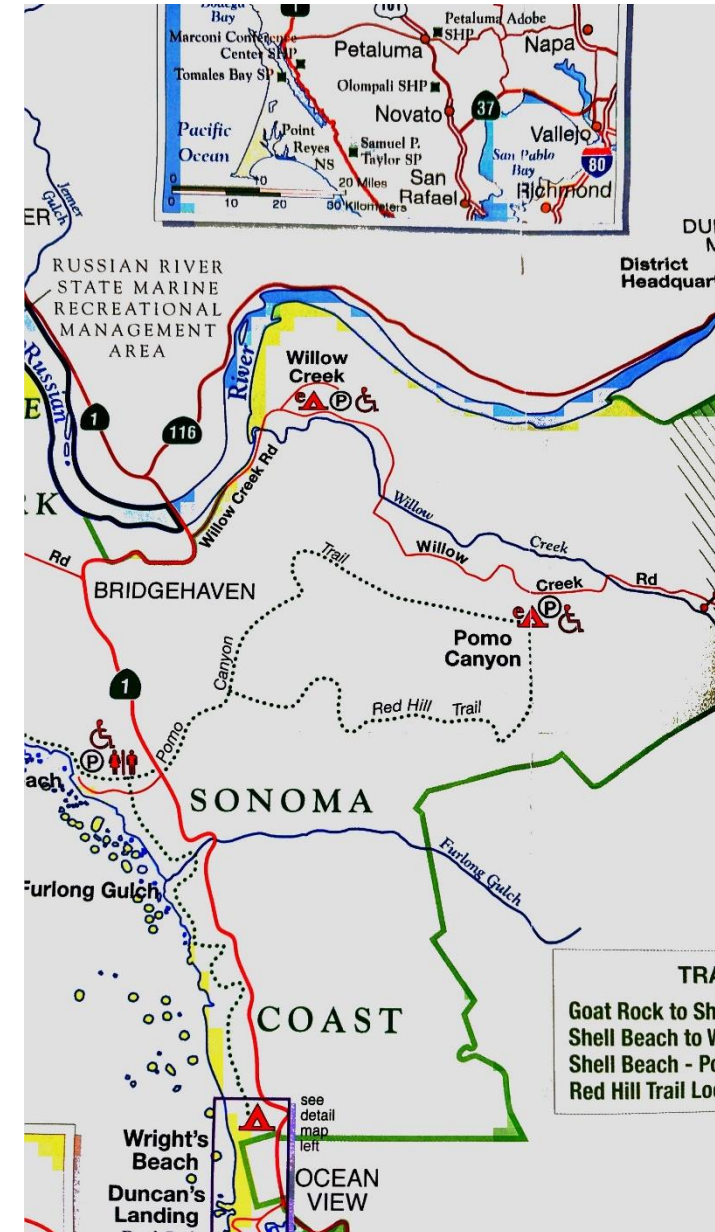
Strategy

- Loop hike.
- Start at East or West lot, complete Bodega head trail as a loop, complete overlook trail as an out and back



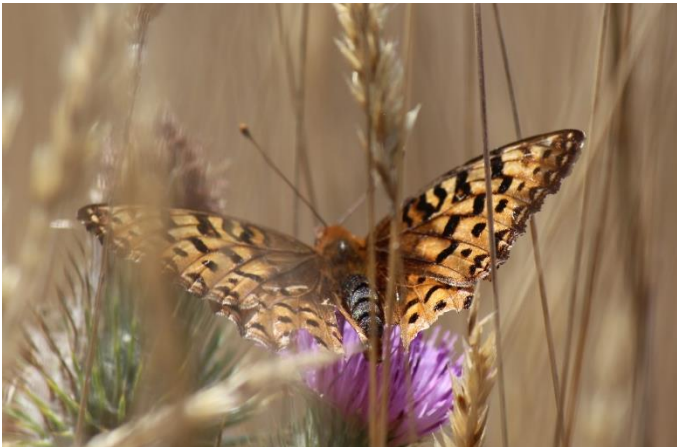
4. Red Hill Loop

- Shell Beach Trail Head
 - Pomo Canyon Trail to junction with Red hill, complete loop or go to Pomo canyon E camp and back
- Trail Mileage: 4 miles loop, or 2.6 miles to Pomo E Camp one way
- Strategy: Out and back exploration or loop



Safety precautions

- Be prepared!
 - Check the weather, bring food, water & fully charged cell phone
 - Inclement weather, wind protection, assessing the conditions
- Out of cell phone coverage area
 - Buddy system, or let someone know where you are going and your estimate time of return
- Uneven terrain, walking through bushes, or light stream flows, unstable footing
- Ticks, check yourself!
- Bluff edge hazards
- Potential to spook wildlife, like bedded down deer
- Do not spend more than 4 hours a day conducting *Viola adunca* surveys



It's a great opportunity to see rarely visited areas of the bluff!

Thank you
&
Enjoy!

