

West Depression Vegetation Monitoring Results

Annual Monitoring of the site has been conducted since 2007 and tells the story of the restoration progress. Pre-project monitoring was not conducted because this site was essentially 100% covered by iceplant.



Figure 1: Locations of transects at West Depression

Between 2007 and 2008, there was very little change in percent native cover over the site. This is largely due to disturbance caused by large wave events in the winter of 2008, which flooded the area and deposited large amounts of seaweed and driftwood on the site. Native cover significantly increased 2008 to 2009 in the absence of disturbance. In transect 1, where the elevation is slightly higher and protected more from high tides/waves, native cover is nearly 100%. Transects 2 and 3 were more heavily impacted by the 2008 storm; thus, native cover in these transects has increased less than in transect 1.

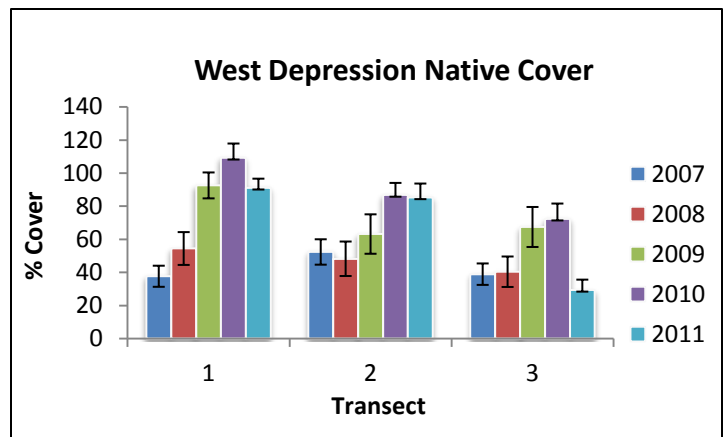


Chart 1: Percent native cover at West Depression from 2007-2011.

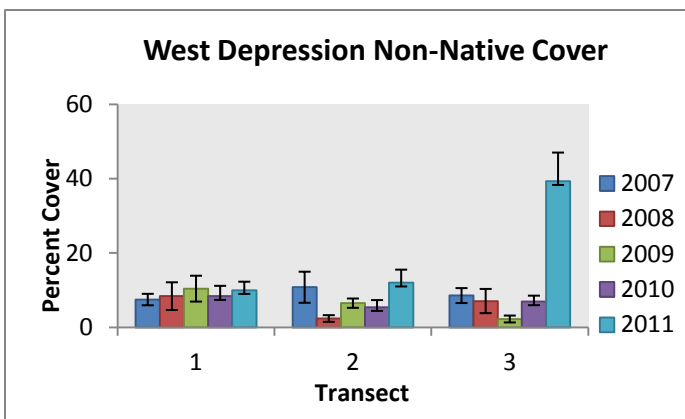


Chart 1: Percent non- native cover at West Depression from 2007-2011.

Non-native cover across all transects has remained very low (less than 20%) throughout the past four years, with the exception of transect 3 in 2011, where a spike in non-native cover can likely be attributed to Bermuda grass. Although removed by hand earlier in the project, conditions appear to have favored the spread of this invasive rhizomatous grass in a few plots.

The effects of the 2008 storm are further illustrated by the large increase in bare ground and thatch in transects 2 and 3 in 2008. These transects were hardest hit by the waves and are where most of the woody debris was deposited. Additionally, the number of native species per square meter was significantly decreased across all transects in 2008 as a result of the disturbance. However, the reduction in native diversity does not appear to be permanent since 2009 data shows a substantial increase in number of species per square meter.

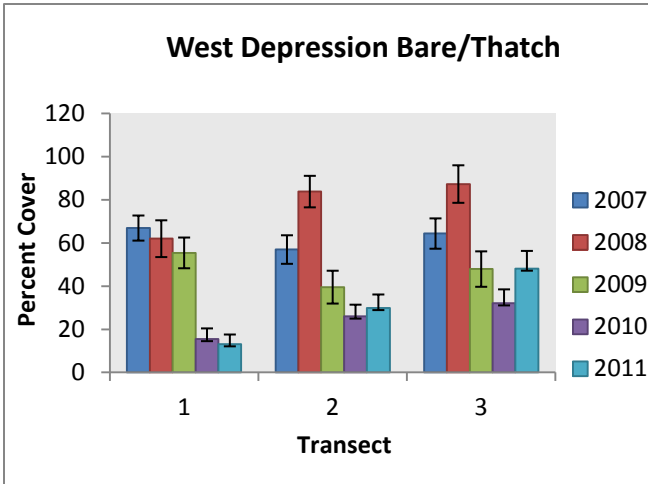


Chart 3: Percent bare ground and thatch cover at West Depression from 2007 to 2011.

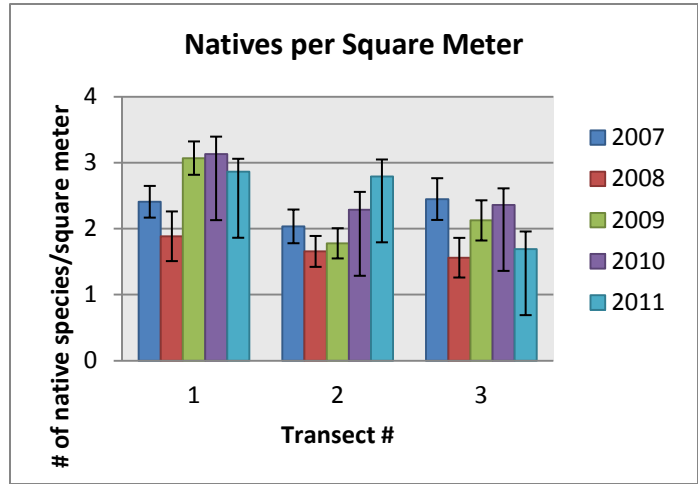


Chart 4: Number of native species per square meter at West Depression from 2007 to 2011.