

## Weed Invasion Story

A thousand years ago, there were hundreds of native plants that lived near the wetlands.

*I need six volunteers to be six different native plants. (Give each student a card and cup of m & m's). Each m & m color represents the seeds from each native plant. (Pour the m & m's into a glass jar.)*

This jar represents the diversity of seeds in the Wetlands.

*Now I need three volunteers to be animals. (Give each student a card.)*

Now the Song Sparrow eats seeds. He/she is going to come up and grab a handful. Did you get a diversity of seeds? *Dump m & m's in a discard cup..*

Rabbit eats grass seeds. He/she is going to come up and grab a handful. Did you get a diversity of seeds? *Dump m & m's in a discard cup.*

Ground squirrel comes up and eats some seeds. Repeat process.

Even though each of these animals took some seeds, the plants continue to grow with a diversity of seeds germinating each year, keeping balance of mm seeds.

Can anyone tell me what I mean when I say there is a great diversity of seeds?

200 years ago, farmers from Spain came to this area.

Can anyone show me where Spain is on this globe?

These people brought their cows with them and they grazed near the Watsonville wetlands. However, the cow hoofs had bristly ox tongue seeds on them.  
*(Pass around real B.O.T. seeds.)*

The seeds were dropped from the cows hooves.

*I need two volunteers to be cows. (Two cows come up. Drop 100 ugly candy seeds in jar.)*

Well, this plant the ox tongue did very well. The next year there were over 1,000 seeds and 44 new plants of the ox tongue.

Does anyone have an idea how this affected the native plants?

Yes, there were less mms.

*I need the animals to come up and try to eat the seeds again. (Have each animal grab a handful.) Each animal has some Bristly Ox-Tongue seed. But the animals don't want the B.O.T. seed.*

Why do you think the animals don't want the B.O.T. seed?

The Ox tongue is taking over more and more each year.

What will happen to the native plants?

*(Add more ugly seeds to the jar to represent more seeds each year.)*  
Unless we do some restoration, this balance will only get worse!

Quick Quiz

How did Bristly Ox-Tongue get to California?

What happened to the native animals when B.O.T. arrived?

What happened to the native plants when B.O.T. arrived?