

# Noxious tumbleweed rolls on Maui

## KIA'I MOKU

By James Leary



Who doesn't appreciate a good Western movie with the iconic tumbleweed rolling across the desolate, open range? Little does the audience realize that when the credits are done rolling there isn't always a happy ending. Tumbleweed (*Salsola tragus* or prickly Russian thistle), is a Federal and State Noxious Weed. The dead tumbleweed seen blowing in the wind is actually an evolutionary adaptation for dispersing viable seeds and invading new territories.

This exotic plant pest is native to Asia and was introduced to the US in the late 1800's via a contaminated shipment of flax seed to South Dakota. Today, it is found in all 50 states of the union, but is most prevalent in the West, where it infests millions of acres of open range. Despite the ability to invade a wide territory, this weed pest likely didn't "tumble" across the Pacific; rather it probably stowed away on a contaminated shipment from the mainland. It is even plausible that this pest originated from just a single container.

Populations of tumbleweed exist on Oahu, Hawaii, and Maui. So far it has not been detected on Molokai and Lanai. Small populations were identified in central Maui over a decade ago, but initial control actions weren't adequate to stop it in its tracks. As the wind rolled nearly perfect balls across Maui's fields,

thousands of seeds dropped out. Now tumbleweed can be found infesting hundreds of acres and spreading into upper Kula, south into Keokea and north into Pukalani.

This weed is very drought-tolerant and is highly invasive in windswept areas and open, disturbed landscapes. With this knowledge of tumbleweed ecology, we fear that new territories are prone to invasion including Haleakala National Park, Paia, Maalaea, and all of West Maui. These infestations are a costly impediment to farmers.

Tumbleweed is also a public safety hazard. In January 2007, Holopuni road was closed as a result of a wind storm that blew in tumbleweeds from the adjacent fields and completely blocked access to oncoming traffic. By the time tumbleweed has reached the "ball" stage, it is quite dry. Rolling, burning tumbleweeds could make stopping the spread of a wildfire even more difficult.

Mature, dry, plants are recognizable as nearly perfect balls up to 3 feet across that bounce across the landscape. Seedlings can usually be found in recently disturbed locations or after recent rain events. They are usually brighter green than the other plants and will develop thorns early. The flower is small, but don't be fooled—a single mature plant is known to produce up to 200,000 tiny seeds.

Although the tumbleweed problem appears to be getting worse, all is not lost. In general, tumbleweed is not very competitive with other vegetation and the seed bank is not very long-lived.

There are many examples on the mainland where viable agricultural production on the landscape is a proven cure.



Above: A tumbleweed, which can be found on three Hawaiian Islands, grows in Omaopio



Left: Dead tumbleweeds sit in a forest in Pulehu. As they roll around, the weed deposits lots of seeds.



Right: This is what a tumbleweed seedling looks like.

So what can you do to help? We're deputizing the local citizenry of Maui to (1) learn how to identify tumbleweed and report the plants to the HDOA Hotline, 643-PEST (7378), (2) support the revitalization of our prime agricultural lands in Central Maui buying local produce and meat products (Have you tried a Kula onion, goat cheese, pineapple, teriyaki grass-fed burger lately? Broke da mouth!) and finally (3) voice your support for the state and county to improve bio-security at our ports of entry to prevent the introduction of new unwanted pests.

We hold high regard for our Paniolo heritage, but let's leave the tumbleweed for Hollywood. For more information please contact your

local CTAHR Cooperative Extension Specialist at 808-352-8774 or MISC representative at 808-573-MISC (6472)

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