



# Unit 3, Troubling Traits, Student Handout #1

Name \_\_\_\_\_

Group Members: \_\_\_\_\_

This is a list of characteristics from a product catalog. Read and discuss them with your group. What product are they describing? Who would want to purchase this product? Why? Fill in your group's answers in the table below.

Strengths	Limitations	Description
Grows well in many different soil types	Needs a lot of fertilizer	Summer growing
Extreme ability to survive droughts	Does not do well with flooding	Branching, fibrous stem
Needs little water	Does poorly in clay soil	Deep roots
Grows quickly after little rain	Frost sensitive	Long, slender, blue-green leaves
Once established, tolerates heavy grazing	Causes health issues with horses	Grey, purple seedhead
No serious disease or insect problems	Low on flavor	Low-tall growing

WHAT?	WHO?	WHY?






## Analyzing data from Saguaro National Park in areas with and without Buffelgrass

A major focus of invasive plant science is understanding characteristics of the areas invaded by non-native plant species and how they differ from non-invaded areas. Several scientists in Saguaro National Park compared the soil, vegetation and soil seed bank of patches invaded and not invaded by buffelgrass. Some data from the study is listed on the next page. "Relative Cover," simply put, means the percentage of land area the plant covers. Please note, the longer the buffelgrass is around, the more likely it is to kill off native species.

**BG (With Buffelgrass)**

**NBG (No Buffelgrass)**

## Species in Saguaro National Park in Areas With and Without Buffelgrass

Plant Species	Relative Cover(%) <b>BG</b>	Relative Cover(%) <b>NBG</b>	Does the plant do better with <b>BG or NBG?</b>	Conclusion: Does buffelgrass have a + or - impact on the plant?
 Foothill Palo Verde ( <i>Parkinsonia microphylla</i> )	2.9	11.2		
 Fairy Duster ( <i>Calliandra eriophylla</i> )	0.6	1.8		
 Desert Lavender ( <i>Hyptis emoryi</i> )	0.2	0.1		
 Prickly Pear ( <i>Opuntia engelmannii</i> )	2.7	8.2		
 Saguaro ( <i>Carnegiea gigantea</i> )	0.3	2.8		

After making conclusions with your group on the impact of buffelgrass on different species of plants, how do you think buffelgrass may impact native animals?

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## Buffelgrass Game

My biggest learnings from playing the Buffelgrass Game were:

1. \_\_\_\_\_

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2. \_\_\_\_\_

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3. \_\_\_\_\_

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## Proposed Solution to Buffelgrass Problem

Explain what method or methods should be used in areas infested with buffelgrass. Explain why you chose the method(s) you selected.

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