



# Text Complexity Analysis of

Dirt Mounds Made by Termites... (title)

National Science Foundation (author)

Recommended Complexity Band: 9-10

## Qualitative Measures

**Meaning/Purpose:** (Briefly explain the levels of meaning (Literary Text) or purpose (Informational Text.) The purpose of the article is easy to identify through the title and subtitle of the text. The author's purpose is to provide information on the role termite mounds have in preventing desertification in grasslands, savannas, and dryland ecosystems.

**Text Structure:** (Briefly describe the structure, organization, and other features of the text.) The text is organized into five sections. The four headings provide some insight on the information provided within that portion of the text. The text uses mostly descriptive and cause/effect text structures.

**Language Features:** (Briefly describe the conventions and clarity of the language used in the text, including the complexity of the vocabulary and sentence structures.) Language used is straightforward. There are several domain-specific vocabulary words used (e.g., *semi-arid*, *desertification*, *drought*, *savanna*), as well as a fair amount of academic vocabulary used (e.g., *resilient*, *phenomenon*, *refuge*, *hotspot*, *rebound*, *onset*, *linchpin*). However, a number of words can be defined through use of context clues. There are a moderate amount of compound and complex sentences used.

**Knowledge Demands:** (Briefly describe the knowledge demands the text requires of students.) Students should have a basic knowledge on grasslands, savannas, and drylands. Understanding general characteristics of termites and having some background knowledge on climate change would be helpful as well.

## Text Description

**Briefly describe the text:** This informational text is designed to support reading in the content area. The article discusses the impact termite mounds are having on semi-arid ecosystems and the surprising realization that scientists have come to in regards to the effects of these termite mounds. The text also describes the importance of scientific modeling to predict plant growth while having termite mounds present.

## Quantitative Measures

**Complexity Band Level (provide range):** Above 11-12

The text falls above the 11-12 grade band according to a quantitative reading measure.

## Considerations for Reader and Task

Below are factors to consider with respect to the reader and task.

### Potential Challenges this Text Poses:

Prior to reading the article, the teacher might want to discuss the topics of ecosystems and biomes, including how they are identified and what differentiates them from each other. However, this information is not critical to understanding the general points of the text. For visual learners, the teacher may want to show images of some of the insects and animals mentioned in the text (e.g., termites (including *Odontotermes*), ants, prairie dogs, and gophers), as well as images of grasslands, savannas, drylands (in Africa, South America, and/or Asia), and termite mounds.

## Recommended Placement

**Briefly explain the recommended placement of the text in a particular grade band:** Although the quantitative measure is high, the author's purpose is easy to identify, the text is structured so that the main points are easy to identify, and many of the domain-specific terms and academic vocabulary have context clues to help determine meaning. With some basic knowledge of ecosystems and termites, the text is appropriate for students in grades 9-10.