

What is a weed?

Summary

Students complete weed puzzles to learn what makes a plant a weed.

Learning Objectives

Students will be able to:

- Define the term “weed”.
- Explain that weeds can cause economic or environmental damage.

Curriculum Connections

Science, Living World, Levels 3-6 (details below)

Vocabulary/concepts

weed, exotic, native, invade
invasive, economic weed,
environmental weed, compete,
outcompete

Time

15 minutes

Materials

- weed puzzles
- copies of “What is a weed?”

Background information

A weed is a plant growing well where it is not wanted. Weeds in New Zealand are a growing problem. They cost billions of dollars to control and often cause irreversible damage to ecosystems. Most New Zealand weeds are exotic plants introduced by people. Exotic plants’ natural enemies are often left behind when they are imported. With no natural controls, these plants may grow and reproduce rapidly, invading agricultural land and native ecosystems. Weeds may outcompete native plants, shade native seedlings so they can’t grow, or change the habitat so that native plants and animals can no longer survive.

Activity

Weedy puzzles

Divide the students into groups of 5. Provide each group with a different weed puzzle.

Ask students to assemble their puzzle and read about their weed. Each group then introduces its weed to the whole class. (Note: If you have groups tape their puzzle pieces together, they can lift the puzzle to show the picture to the class)

As a class, discuss what features these weeds have in common. What makes them weeds? Create a list of “weedy” features on the board.

Hand out copies of “What is a weed?” to each group. Ask groups to read and discuss this definition of weeds. How close did your class get to the definition of a weed?

Curriculum Connections

Science--Living World

Levels 3 & 4

- Ecology: Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

Level 6

- Ecology: Investigate the impact of natural events and human actions on a New Zealand ecosystem.

Vocabulary/concepts

Compete – to fight for the same resources (e.g.: water, light, nutrients, etc.)

Economic weed – a plant harmful to money making activities such as agriculture or forestry.

Environmental weed – a plant harmful to native plants or animals.

Exotic – Not found naturally in New Zealand. Introduced accidentally or deliberately from elsewhere by people. Also called introduced or alien.

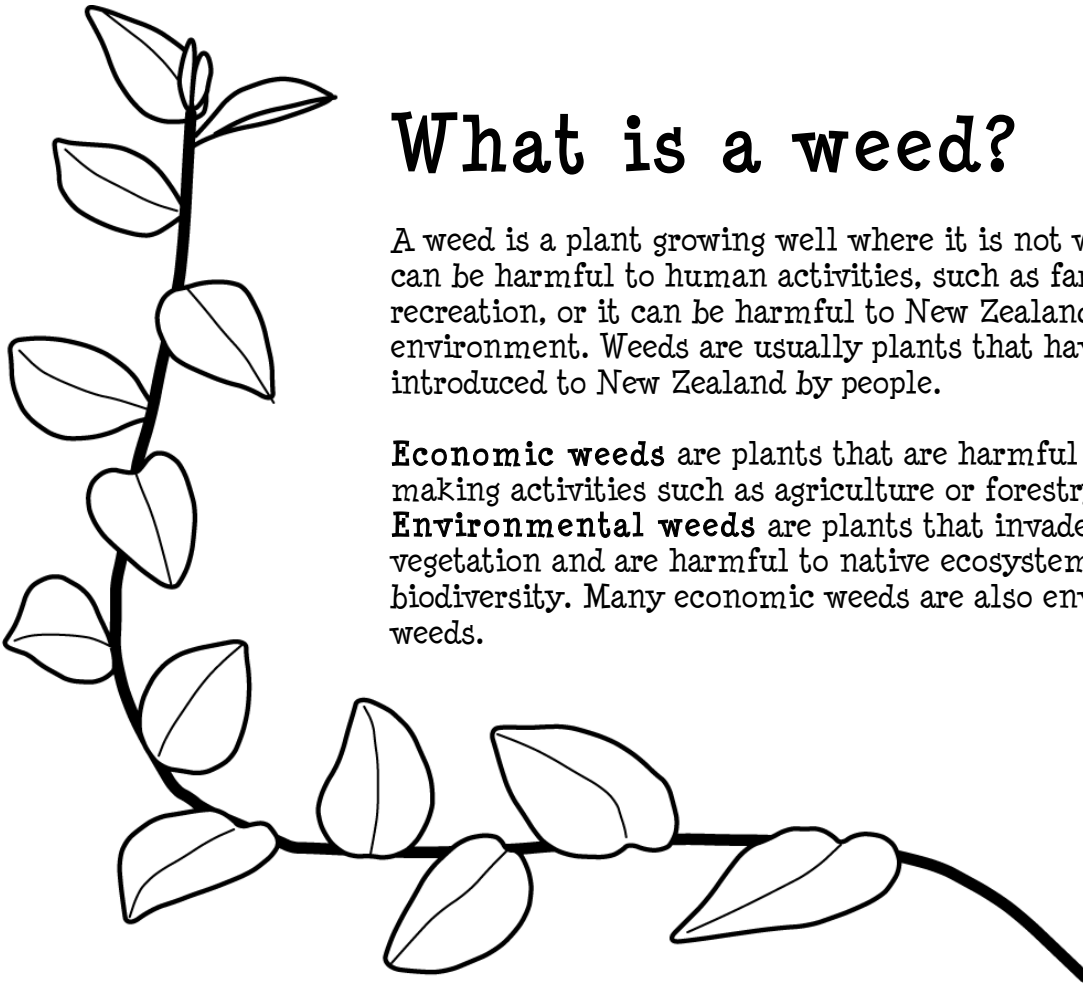
Invade – to spread from its starting point.

Invasive – plants have spread from the place they were introduced.

Native – Found naturally in New Zealand. Not introduced by people.

Outcompete – to win the fight for resources over another plant or animal. This may mean the “loser” dies or its growth or reproduction is reduced.

Weed – A plant growing well where it is not wanted.



What is a weed?

A weed is a plant growing well where it is not wanted. It can be harmful to human activities, such as farming or recreation, or it can be harmful to New Zealand's unique environment. Weeds are usually plants that have been introduced to New Zealand by people.

Economic weeds are plants that are harmful to money-making activities such as agriculture or forestry.

Environmental weeds are plants that invade native vegetation and are harmful to native ecosystems and/or biodiversity. Many economic weeds are also environmental weeds.

Ragwort



Invades river beds and open forest

Introduced from Europe

Invades pasture

Poisonous to livestock

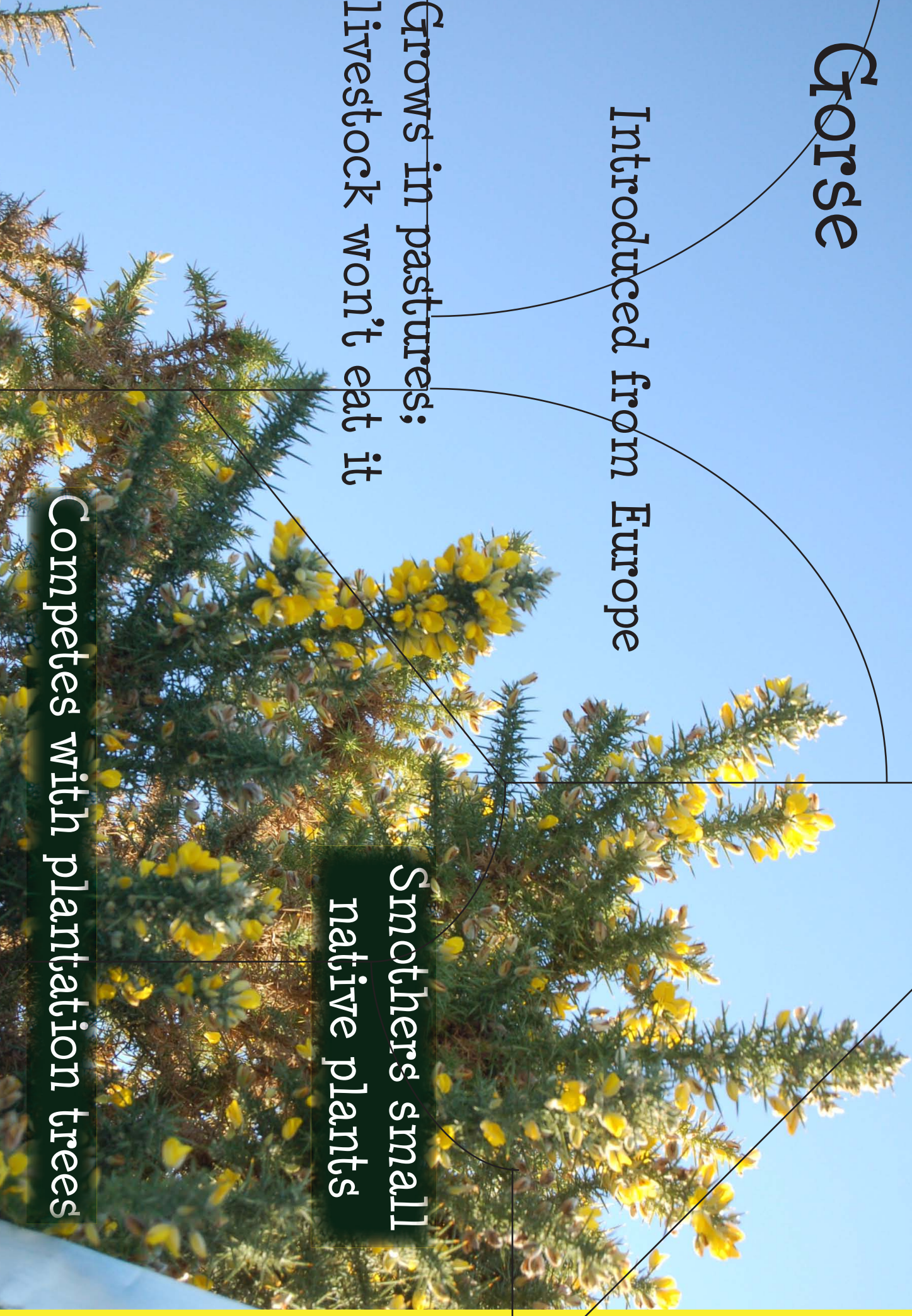
Gorse

Introduced from Europe

Grows in pastures;
livestock won't eat it

Smothers small
native plants

Competes with plantation trees



Tradescantia

Invades native forest

Kills tree seedlings

Smothers native plants

Introduced from Brazil



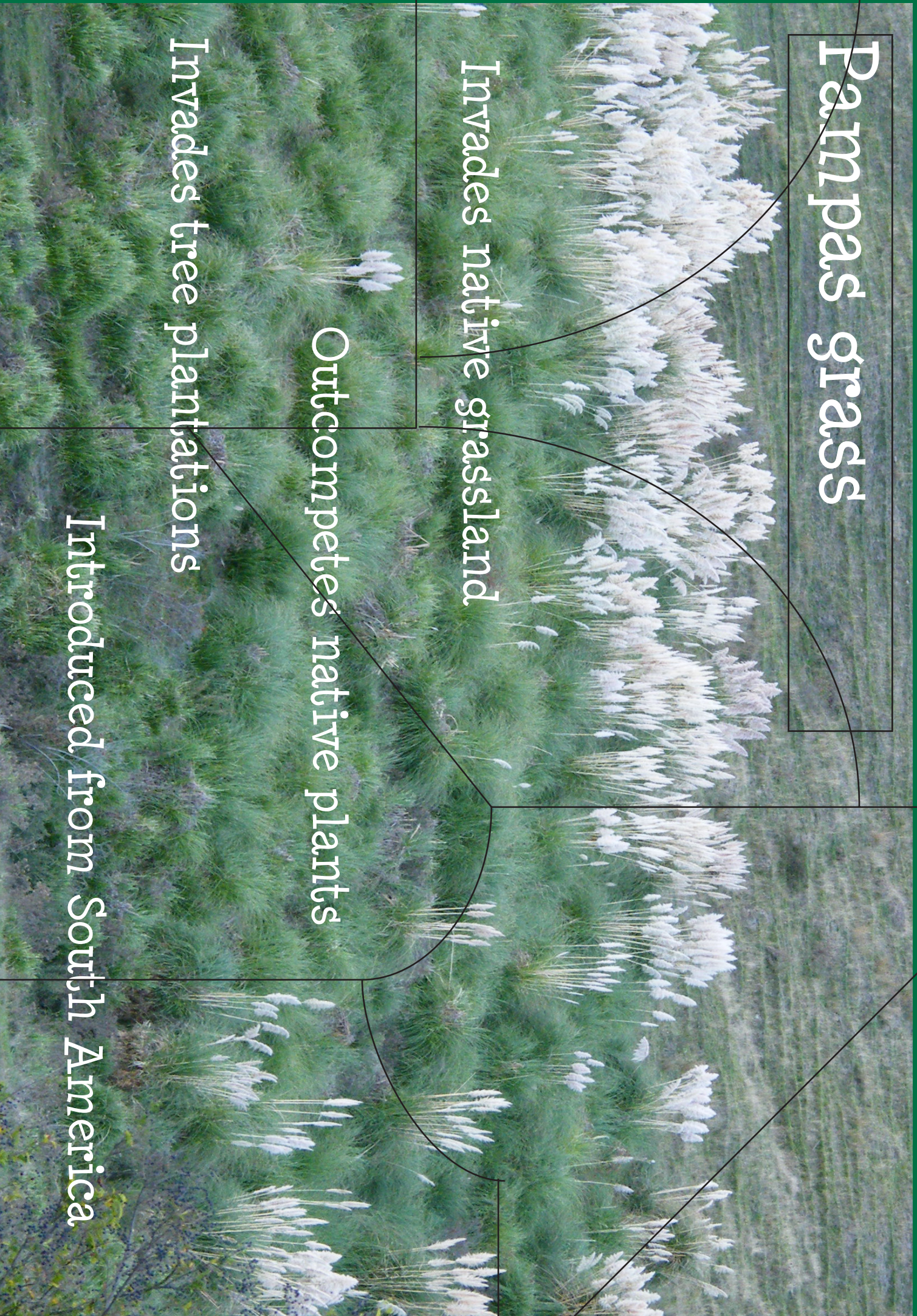
Pampas grass

Invades native grassland

Outcompetes native plants

Invades tree plantations

Introduced from South America



Heather



Introduced
from Europe

Smothers
small native
plants

Invades alpine
grassland

Helps other weeds
establish

Wilding pine

Introduced for forestry from
the Northern Hemisphere

Replaces native grassland
and shrubs

Invades native forests

Shades out
native plants

