

**Title:**

*What the Biome?*

**Author(s):**

*Krystie Diaz*

*Dr. Phillips High School*

[krystie.diaz@ocps.net](mailto:krystie.diaz@ocps.net)

**Abstract:**

*The viewing of the Tree Tender movie could help spark an interest in the biomes of the planet by inciting the students to consider how all life on Earth is connected and how small changes, both good and bad can change how organisms interact within a biome.*

**Subject, Grade, Level:**

*AP Environmental Science*

**Learning objectives:**

- *Perform research using credible internet sources*
- *Collaborate with their peers to identify a problem and find a solution*
- *Critically think about how our actions affect the planet*
- *Critically think about solutions to real problems on our planet*
- *Create an eye-catching representation and report on a biome*
- *Gain skills in public speaking*

**Timeframe:**

*Watching Tree Tender takes about 15 minutes. Project should take about a week and a half for in-depth research and a well-made project. If time constraint occurs, project and depth of research and presentation can be altered so work takes a few hours. Students will take approximately 2 days to conduct their research and create a slide presentation which will be presented on the third through fifth days. During presentations, the rest of the students will compile their information in their very own biome book which can then be used to study for the AP test.*

**List of materials:**

*computer with access to the internet and a slide making software such as Google Slides or Powerpoint*

*copies of the handouts*

**Procedure and general instructions (for instructor). REQUIRED.**

*Students will work in pairs or a group size of your choosing (no more than 4) to create awareness of the biomes of the Earth both terrestrial and aquatic. They will create a slide*

*presentation which will be presented to the class so that the students may construct a biome book. Each biome of the book is dedicated approximately 1 sheet of paper front and back.*

*As the teacher, you can choose which biomes you want to include or you can let the students choose. You can choose to include aquatic biomes or not. For each biome student groups will need to identify key plant and animal life as well as a description of the current and historical climate, location of the biome and give the cause and effect for any changes.*

*After viewing Tree Tender and gaining hope that even a small thing can change the world for the better they will have to identify why the biome is important and what one thing they can do to help preserve the biome.*

### **Procedure and general instructions (for students).**

You will work in pairs to research and create a slide presentation on their given biome in order to present to the class so that they can complete a biome book.

The following information must be included in the slide presentation and all slides should include at least 1 picture.

- Name of biome
- Where biome is found (typical latitude and longitude range)
  - Terrestrial
    - Key land features
    - Key soil features
  - Aquatic
    - Freshwater
    - Saltwater
    - Brackish
- Description of biome
  - Dominant plants
    - Historically
    - Major change in dominant plants range or population size
    - Causes for such changes
    - Effects of such changes
  - Dominant animals (may include invertebrates)
    - Historically
    - Major change in dominant animals range or population size
    - Causes for such changes
    - Effects of such changes
  - Climatogram
    - Historical
    - Present

- Cause and effect of changes
- Importance to life on Earth
  - Why should we care what happens in this particular biome?
- How does the future look for this particular biome?
  - Promising
  - Bleak
- One thing we can do to preserve the biome

Next you will find sample of a biome book page for terrestrial and aquatic biomes (you can have the students color in where the biome is located on the map)

## Terrestrial



Key land features

Key soil features

### Dominant plants

Historically

Major changes

Causes

Effects of changes

### Dominant animals

Historically

Major changes

Causes

Effects of changes

### Climatogram

Historically

Major changes

Causes

Effects of changes

Why should we care what happens in this particular biome?

How does the future look for this particular biome?

\*One thing we can do to preserve the biome

## Aquatic



Key features

Water features

**Dominant plants**

Historically

Major changes

Causes

Effects of changes

**Dominant animals**

Historically

Major changes

Causes

Effects of change

## Climatogram

Historically

Major changes

Causes

Effects of changes

Why should we care what happens in this particular biome?

How does the future look for this particular biome?

\*One thing we can do to preserve the biome