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# Madagascar Dry Forests

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# Characteristics

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- The biome in Madagascar is the tropical rainforest
- Characteristics of this biome include:
  - high animal and vegetal biodiversity
  - evergreen trees
  - dark and sparse undergrowth interspersed with clearings
  - organic matter settling on the ground
  - presence of “strangler” creepers
  - Presence of “buttresses” (large winged ribs at the base of trunks) and spindly roots in trees living in often-flooded areas.
- This biome is important because it is the home to all the species, populations, communities, and organisms that live there, and they can’t survive without the biome.

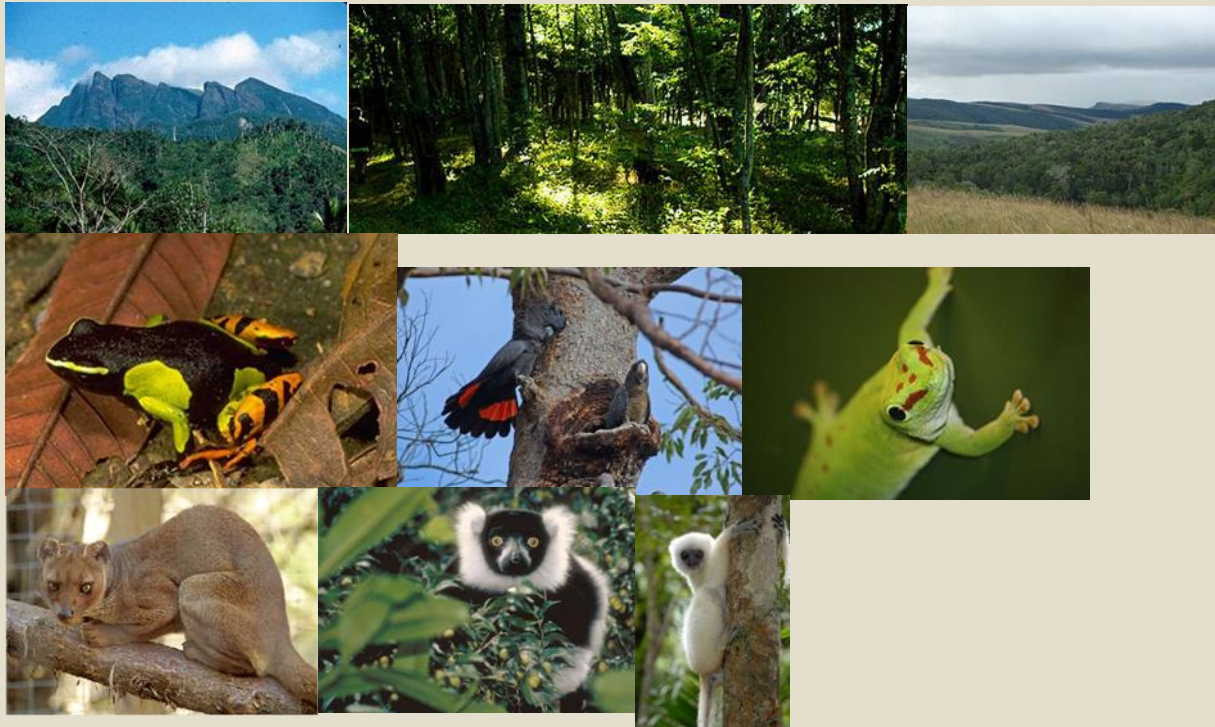
# Ecoregions

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- The ecoregions of Madagascar's biome are:
  - Mangroves
  - Dry deciduous forest
  - Subhumid forest
  - Lowland forest
  - Ericoid thickets
  - Spiny thickets
  - Succulent woods within a spiny thicket region

# Food Web

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The producers, the bottom of the food web are consumed by the herbivores, also known as the secondary consumers, which whom are consumed by the carnivores, also known as the tertiary consumers.



A sunset over a savanna with baobab trees. The sky is filled with orange and pink clouds, and the trees are silhouetted against the bright light. A thin horizontal line is visible above the title.

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# Ecological Issue

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JENNI WHITBECK

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# Ecoregion

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- Island off the coast of South Africa
- Why it's unique;
  - All species only can live there
  - 'Eighth continent'
  - Only two seasons
  - Was once part of Africa
  - Has lost around 90% of forest population



# Issue

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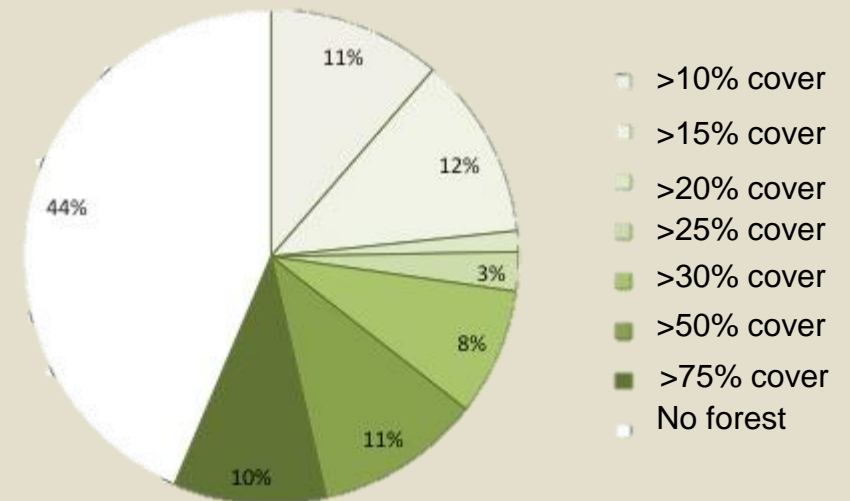
- Overexploitation of natural resources
- Deforestation

# Cause

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- Overexploitation
  - Hunting native species for families
  - Poorly regulated fishing
  - Uncontrolled burning
- Deforestation
  - Tavy or slash-and-burn agriculture
  - Logging for tinder
  - Charcoal production

Madagascar Forest Cover, 2012





# Solution

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- Give what you take
- Changing the politics
- Plant a tree



# Other Issues

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- Erosion and soil degradation
- Fires
- Invasive Species

# References -Jenni

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# Endangered Keystone Species

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KENNA WILLIAMS

The background of the slide features a silhouette of several baobab trees against a bright, hazy sunset sky. The sun is positioned behind the trees, creating a strong backlight effect. The sky is filled with soft, white clouds. At the bottom of the image, there is a solid green horizontal bar.



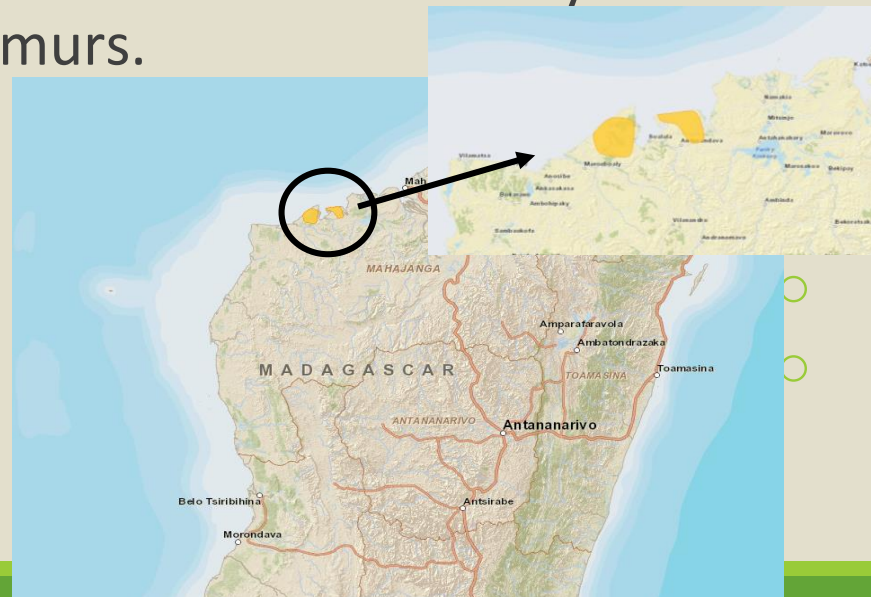
# Aye-eyes



- Aye-eyes (*Daubentonia madagascariensis*) inhabit the island of Madagascar.

- Aye-eyes are primates related to monkeys, apes and humans but they are actually lemurs.

- Aye-eyes are omnivore and live up to 20 years



- Role in ecosystem:

- the aye-aye work to distribute seeds from fruit and trees. Also they are the main predator of the wood-boring beetle.

Food web:

They eat a variety of fruit, berries, plants and insects that live in bark.

- Their predators are the fossas.

# Angonoka Tortoise

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- Angonoka tortoises (*Astrochelys yniphora*) are found in the dry forests of Madagascar
- Angonoka tortoises are herbivores and live up to 40-50 years
- Once the tortoise emerges from its shell it is all ready independent
- Role in ecosystem:
  - Dispersing seeds of plant life in area
- Food web:
  - They eat a variety of dung, leaves and fruit.
  - Their predators are the African bushpig.
- Fun Fact: The males compete for a mates by wrestling and the one who can flip the other is dominant and wins.





# Ring Tail Lemur

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- The ring tailed lemur (*Lemur catta*) inhabits the forests of Madagascar
- Ring tailed lemurs are omnivores and they live up to 16-19 years
- They are considered primates
- Grow about 15 inches long
- Food web:
  - They eat a variety of plants, fruit, berries and sometimes insects.
  - Their predators are the fossas.
- Role in ecosystem:
  - Help spread seeds and their predation helps stabilize the ecosystem



# Population and Reproduction

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- Aye-aye:

- Live up to 20 years
- Reproduce every 2-3 years (one offspring)



- Angonoka Tortoises:

- Live up to 40-50 years
- Reproduce annually (1-2 offspring)



- Ringtail Lemur:

- Live up to 16-19 years
- Reproduce annually for the age of three and up (one offspring)



# Conservation

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- Aye-aye

- People believe they are evil and usually kill them on sight

- Deforestation

- Conservation:

- People in the area have created breeding colonies to expand population.

- Angonoka Tortoises

- Humans find them and keep them as pets

- Habitat being turned into farm land

- Conservation:

- People from conservation agencies are taking them from owners and are breeding them

# Conservation (cont.)

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- Ringtail lemur
  - People have cut down trees in their habitat limiting their resources for food and shelter
  - Conservation:
    - The Primate Specialist Group put the ringtailed lemurs on the top priority list



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The background of the slide features a sunset sky with soft, orange and yellow light filtering through scattered clouds. In the foreground, the dark silhouettes of two large baobab trees stand prominently against the bright sky. The tree on the left is taller and has a more rounded canopy, while the one on the right is slightly shorter and more slender. A thin, horizontal white line is positioned above the main title, and another is positioned below it, framing the text.

# Invasive Species

AMEERAH M CLOUD

# Introduction

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- Invasive species
  - Non-native organisms who can cause harm to area
- Two main invasive species:
  - Giant African Snail: *Achatina Fulica*
  - Water hyacinth: *Eichhornia Crassipes*



# Food Web

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- The Water Hyacinth:

- Producer
- Feeds on sunlight and photosynthesis; native too
- Flies, mosquitos, small water life; native too

- Giant African Snail:

- Primary consumer
- Fruit, veggies, plants; both habitats
- Caterpillar, beetles, many vertebrae's; both habitats

# Problem

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- Quick to reproduce
- Eats over 500 plant types
- Spread disease (human meningitis)



- Cover whole pond area
- Blocks sun for aquatic plant life
- Mosquitos and disease

# Transportation

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- African Snail and Water Hyacinth
  - Intercepted at ships
  - Popularity one has all want
  - Intentional to help purify water of waste products
  - Unintentionally started germinating rapidly

# Solution

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- Water Hyacinth

- People cut them down
- Let them die
- Pull out with machinery
- Spray pesticides



- Giant African Snail

- People eat them
- Put up for sale
- Catch and ship back to origin





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