

# Geography of Hawaii

## Lecture #1

# What's in a name?

- Originally called the “Sandwich Islands” by English explorer Captain James Cook in 1778
- “Hawa” means “traditional homeland”
- “ii” means small and raging



■ The name “**Hawaii**” stands for two things:

1. The big island is called Hawaii
2. The group of island all together are known as Hawaii



# Hawaii



Kauai



Oahu

Honolulu



Molokai



Lanai



Kaho'olawe



Maui



Big  
Island

Hawaii



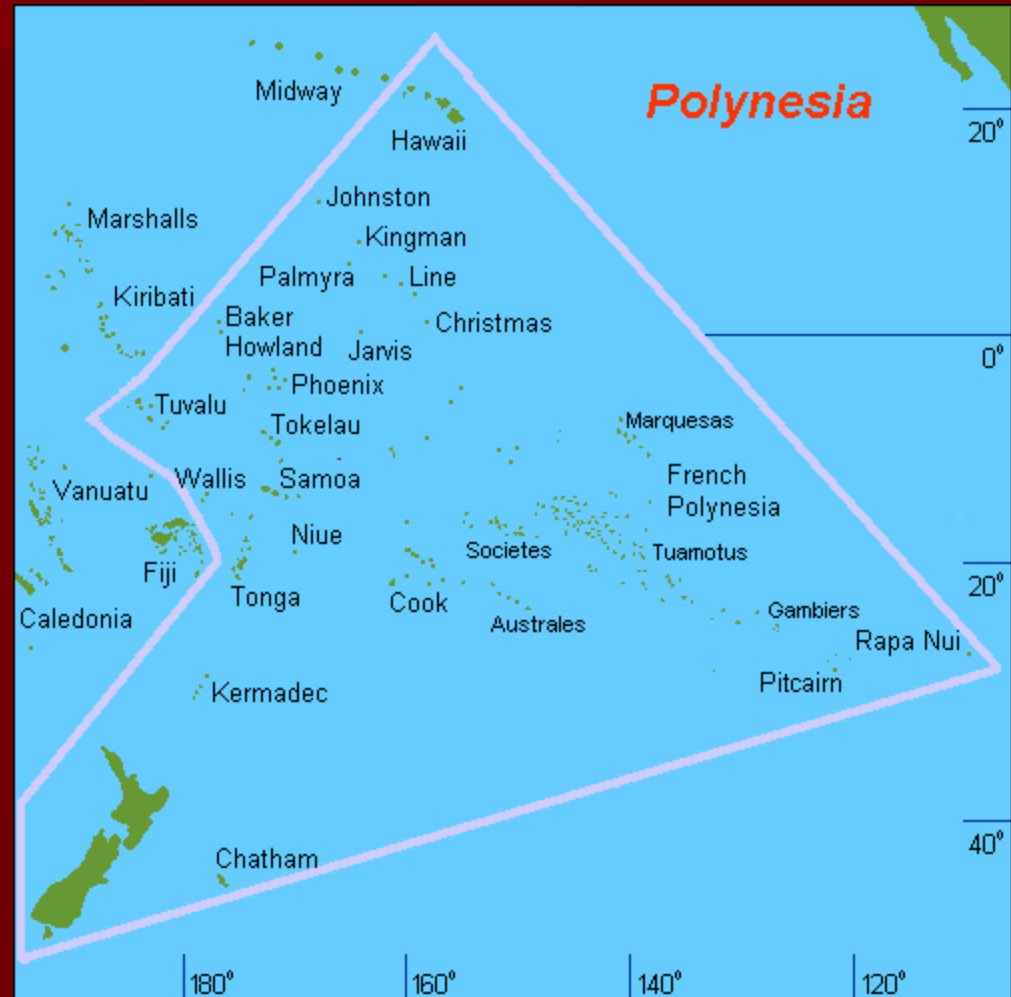
60 km

# Where is Hawaii?



# Polynesia

- Hawaii is part of a group of islands called “Polynesia”



# Ring of Fire

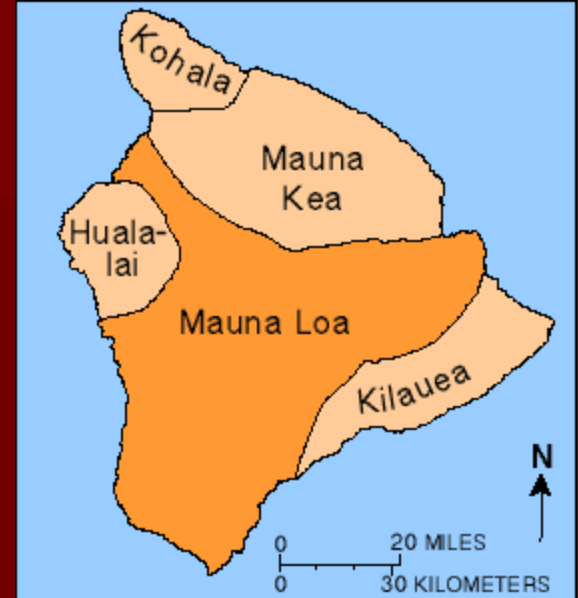


- Hawaii is part of the “Ring of Fire”, a chain of volcanoes that border the Pacific Plate

- The Pacific Plate is moving towards Asia about 3 inches per year

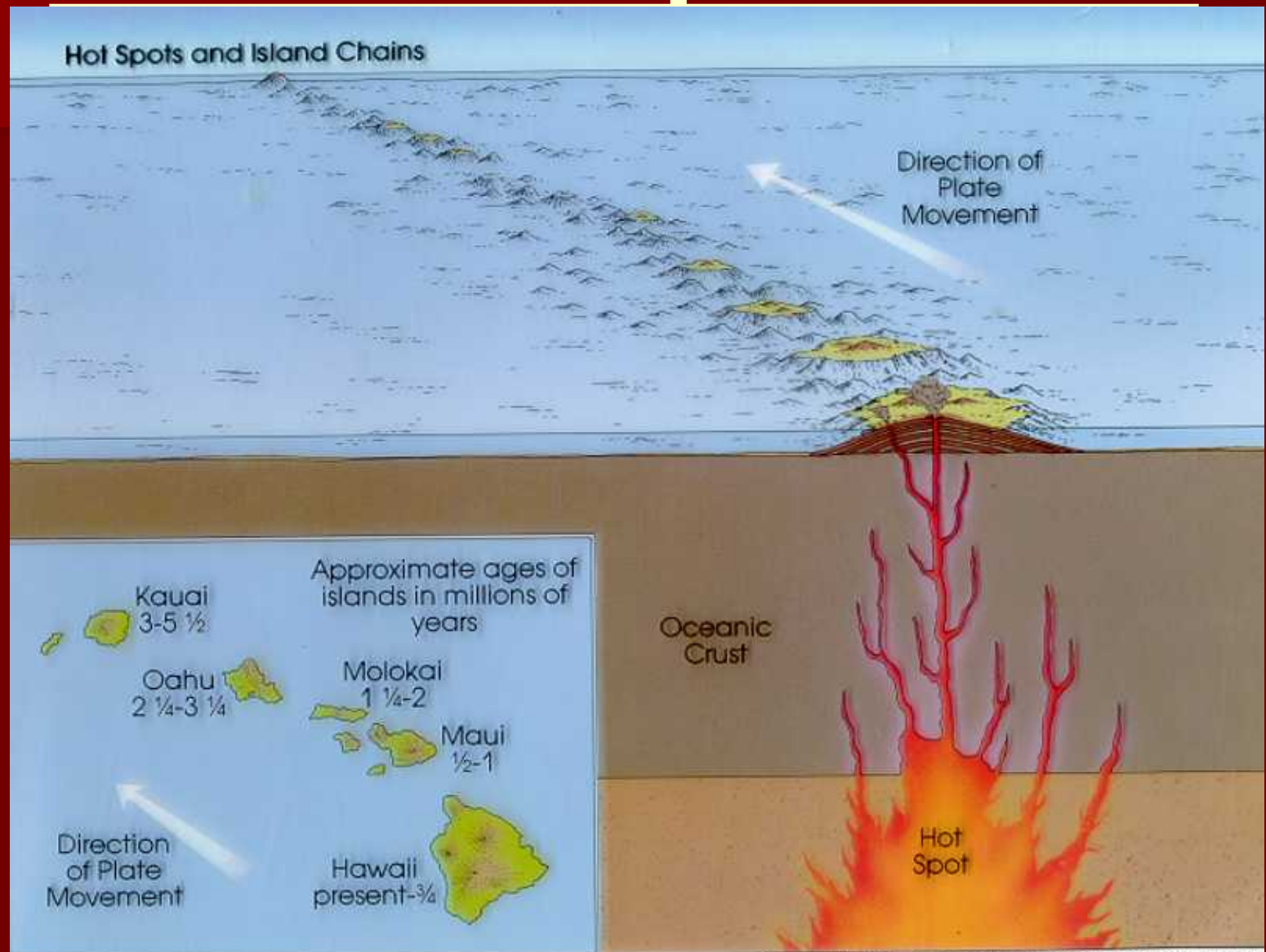
# Volcanoes

- Hawaii was created from active volcanoes
- Volcanoes on Kauai stopped erupting millions of years ago
- The Kilauea volcano on the Big Island has been erupting continuously for the last 20 years!





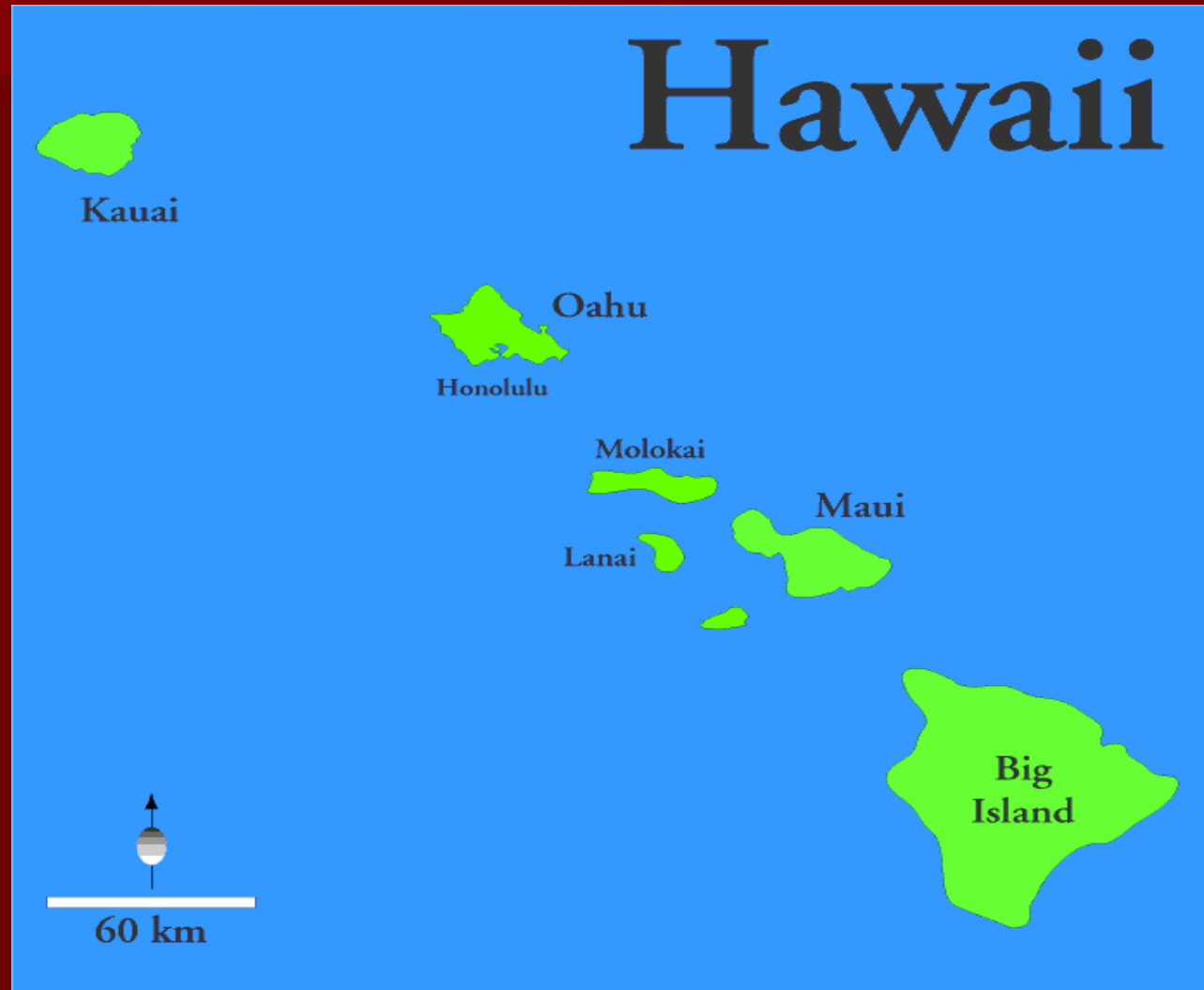
# How do Hotspots work?



# Shield Volcanoes

As the islands move off of the hot spot (under the Big Island right now), wind and water start eroding the soil on the islands

This causes the islands to have different shapes



# Hot lava!















**NO  
PARKING**



# Different Kinds of Lava

## ■ Pahoe'hoe

- Lava flowing like water
- Can flow uphill!
- Ropey
- Erupts slowly



## ■ A'a

- Spewing, shooting
- Stony, rough
- Erupts quickly





# Old & Young Islands

- Oldest Island

- Ni'ihau

- Youngest Island

- Lo'ihi (under water still)

- Big Island (still growing!)

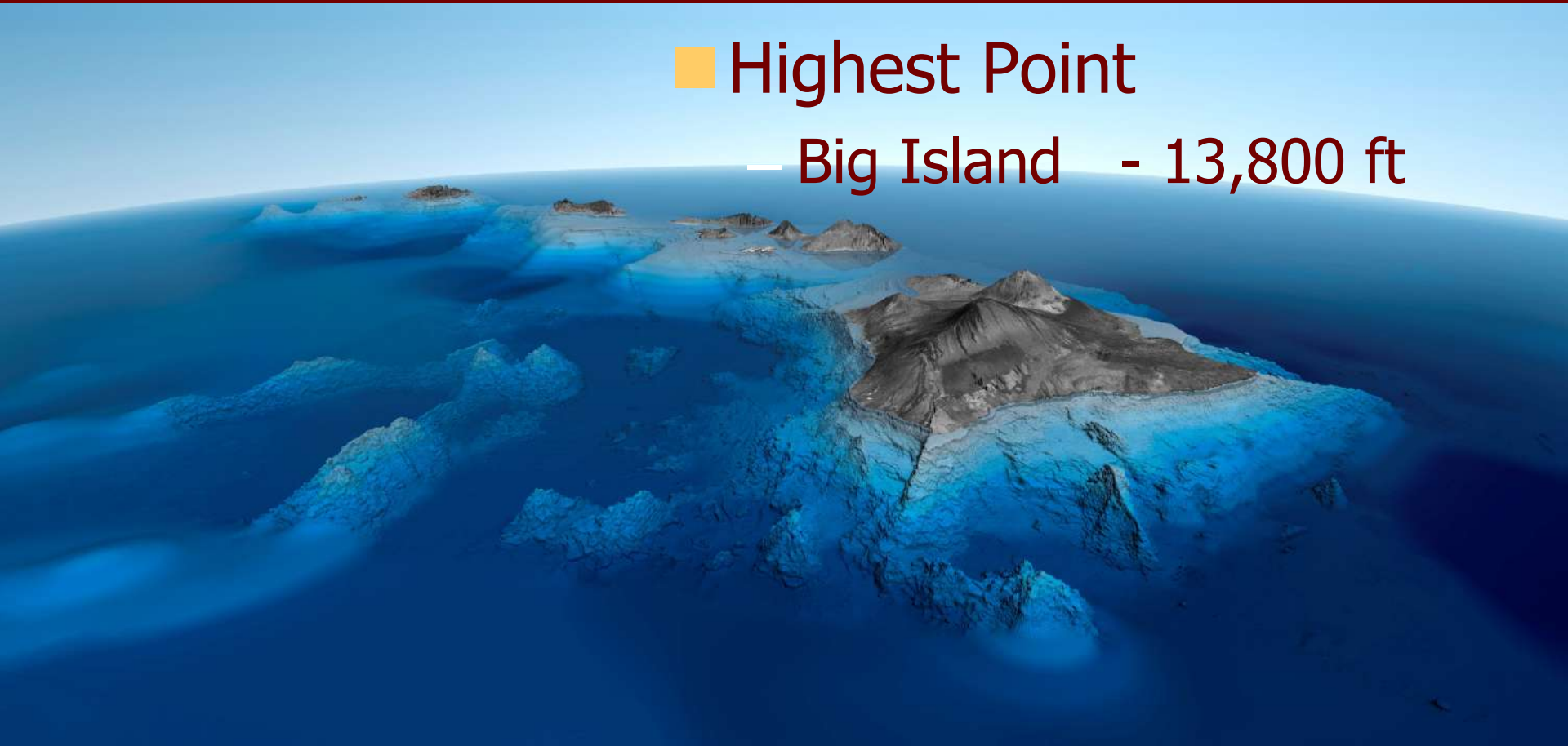
# Elevation

## ■ Lowest Point

– Ni'ihau Island - 1280 ft.

## ■ Highest Point

– Big Island - 13,800 ft



# Dry Sides and Wet Sides

- Windward sides of the island get more rain
  - Side that faces the “Trade winds”
  - Usually the northeast sides of the island
- Leeward sides of the island gets drier air

