Redwoods, conifers, epiphytes

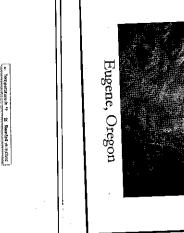
#### ANIMAL 3

Grouse, mountain lion, moose

Adaptation:

## TEMPERATE RAINFOREST







### ABIOTIC FACTORS 3

warm summers; year-round precipitation; fertile soils cold to moderate winters;

Anthropogenic 9 logging

Coniferous, leaves have thick waxy coatings and are small, lichens

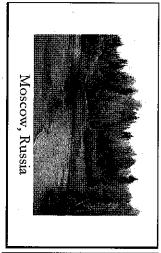
#### ANIMAL 5

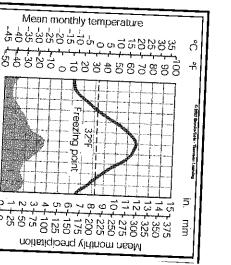
Moose, wolf, lynx, bobcat

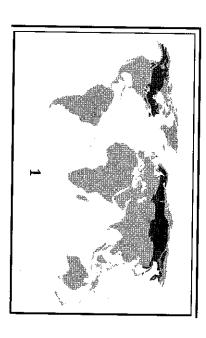
#### Adaptation:

extreme cold, eat lots of different and have thick fur coats for Birds migrate, animals hibernate

## TAIGA/BOREAL FOREST







### **ABIOTIC FACTORS 1**

precipitation; high humidity; acidic, nutrient-poor soils mild summers; moderate long, cold winters; short,

13, 325 10, 22, 50 11, 23, 300 11, 23, 300 10, 22, 50 10, 22,

### Anthropogenic 8

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Months 3

Exploration of oil, climate change is causing loss of cold adapted species, logging

woody evergreen shrubs with small, leathery leaves; fragrant, oily herbs that grow during winter and die in summer, hot spot for diversity

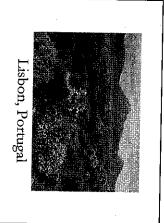
#### **ANIMAL 8**

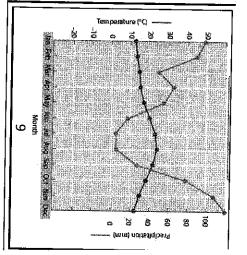
gecko

#### Adaptation:

Small and nocturnal

### CHAPARRAL







### ABIOTIC FACTORS 7

warm temperatures in winter; season rainfall; hot dry summers; semiarid, periodic fires, nutrient poor soil

### Anthropogenic 2

Development, air pollution

and bromeliads, epiphytes, high broad-leaved evergreen trees; and climbing plants; orchids ferns; large woody vines diversity

#### **ANIMAL 2**

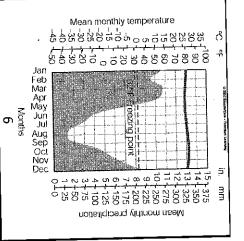
Sloth, monkeys, many different kinds

Specialists Adaptation:

## TROPICAL RAINFOREST









### **ABIOTIC FACTORS 4**

hot and wet year-round; thin, nutrient-poor soils

### Anthropogenic 7

unusable after a few years, logging, Wars-Clearing of forests for farming, soil is Congo

cacti and other succulents;
creosote bush and other
plants with short growth cycles,
plants with reduced leaves

#### ANIMAL 7

Lizards, camels

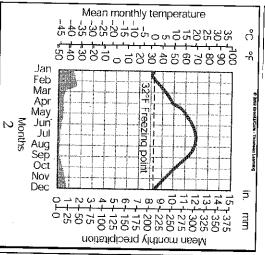
#### Adaptation:

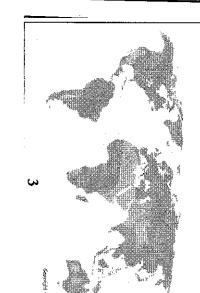
Burrowing, nocturnal, store water

# DESERT (NO SPECIFIC TEMPERATURE)









### **ABIOTIC FACTORS 2**

low precipitation, variable temperatures; soils rich in minerals but poor in organic material

### Anthropogenic 4

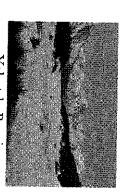
Desertification, mining, firewood gathering, climate change, overgrazing, fragile ecosystems with fragile soils hurt by recreation vehicles

DOMINANT PLANTS 5
Some algae

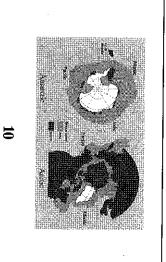
ANIMAL 10

None
Adaptation:

## ARCTIC/ANTARCTIC POLAR

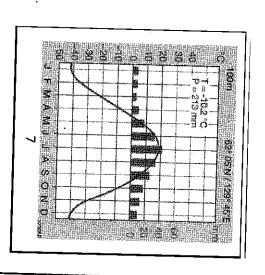


Yakutsk, Russia



### ABIOTIC FACTORS 8

No exposed soil, ice, very little precipiation



### Anthropogenic 3

Airborne pollutants, melting of ice due to climate change

lush, perennial grasses and herbs

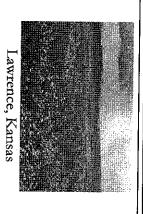
#### ANIMAL 6

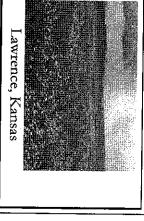
Prairie dog, ferret, bison

#### Adaptation:

predators Burrowing, sharp claws to fight

### TEMPERATE GRASSLAND (PRAIRIE)

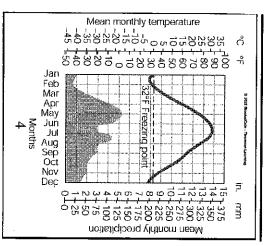






### **ABIOTIC FACTORS 10**

winters and seasonal precipitation World's most fertile soils, periodic fires, warm to hot summers, cold



### Anthropogenic 6

Lost habitats due to farming, overgrazing, prevention of periodic fires

Tall grasses, some trees, plants grow leaves during wet season, some turn brown during dry season, fire resistant

#### ANIMAL 1

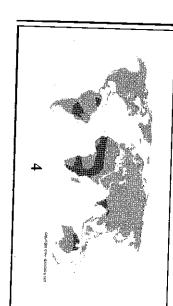
Rhino, elephants, zebras

#### Adaptation:

Migrate due to drought season

#### TROPICAL GRASSLAND (SAVANNA)





### ABIOTIC FACTORS 6

mild températures; abundant precipitation during fall, winter, and spring; relatively cool, dry summer; rocky, acidic soils

## Mean monthly temperature 35 100 36 90 36 90 36 90 37 16 37 5 38 50 38 50 40 11 275 40 12 25 40 1

### Anthropogenic

Clearing of land, grazing, slash burning, gathering of firewood

ground-hugging plants such as mosses, lichens, sedges, and short grasses

#### ANIMAL 9

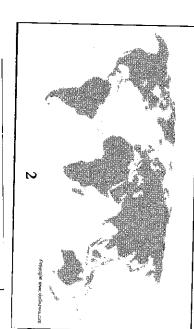
Adaptation: Reindeer, bear, small rodents

migrate

#### POLAR GRASSLAND (TUNDRA)

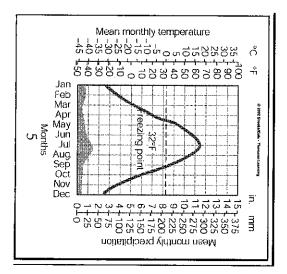


Fort Yukon, Alaska



### **ABIOTIC FACTORS 9**

short and soggy summers; long, strong winds; low precipitation; cold, and dark winters; poorly developed soils; permafrost



### Anthropogenic 1

development is a threat Airborne pollutants, melting of permafrost due to climate change, gas and oil

# TEMPERATE DECIDUOUS FOREST

### DOMINANT PLANTS 6

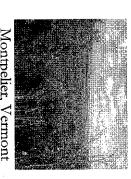
flowering shrubs; herbs trees; some conifers; broadleaf deciduous

#### ANIMAL 4

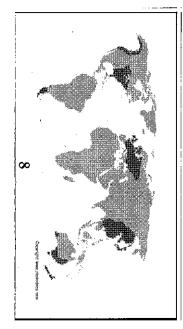
Owls, raccoons, deer

#### Adaptation:

some animals may hibernate or Birds migrate due to cold winters,







#### Mean monthly temperature Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Months 10 13-325 10-250 9-225-00 9-225-00 10-25

### **ABIOTIC FACTORS 5**

winters; moderate, seasonal warm to hot summers; cold precipitation; fertile soils; occasional fires

### Anthropogenic 10

rain, logging, climate change is changing the amount of precipitation Most lost biome, development, ag, acid