

The Crow

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1 Description of Biome

The temperate deciduous forest.

”Temperate deciduous forests have a great variety of plant species. Most have three levels of plants. Lichen, moss, ferns, wildflowers and other small plants can be found on the forest floor. Shrubs fill in the middle level and hardwood trees like maple, oak, birch, magnolia, sweet gum and beech make up the third level. Conifers like spruce, fir and pine trees can also be found mixed in with the hardwood trees in this biome. Sometimes the taiga and the temperate deciduous forest overlap.” (NatureWorks 2017)

1.1 Plant Types

1.1.1 Trees

Deciduous trees are those whose leaves turn colors and fall once a year. They usually have large leaves used to collect sunlight for photosynthesis in the Summer. Some examples of broad leaf deciduous trees include ash, beech, birch, maple and oak.

Because of cold winters and lack of sunlight, deciduous trees can’t keep their big broad leaves all year round due to freezing. As such, the trees stop providing water to leaves when cold or dry weather approaches. Without the sunlight and water, leaves can’t produce chlorophyll, and as such change colors, wither and die.

Losing leaves helps the trees to conserve water, and before the leaves die, some of the energy is brought back into them.

After Winter, warm weather triggers leaves to grow again.

1.1.2 Brush

”Seed Dispersal Plants rely either on wind or animals to dispers seeds and thereby help enusre future germinatino” (Yahner 2000)

Description of the soil type

The predominant soil found in the deciduous forest biome is alfisol. This type of soil is characterized by a gray to grayish-brown coloration and a relatively high fertility. Alfisols form via the processes of weathering, eluviation and illuviation.

1.2 Unique Characteristics

Examples of unique characteristics or landforms (can be pictures, etc.)

1.3 Biome Location

1.3.1 Map

Source: Fischer, Marshall, Camp. 2013 REVIEW PAPER Disturbances in deciduous temperate forest ecosystems of the northern hemisphere: their effects on both recent and future forest development.

1.3.2 Lattitude

1.3.3 Countries

1.4 Climate

Climate (rainfall, temp., etc.)

1.5 Human Interaction

1.5.1 Harvesting of Wood

1.5.2 Dams for Energy

1.5.3 Farming on Fertile Soil

”high population density generally a push factor in origin areas (along with land scarcity and rural unemployment possibilities), but low population density was a pull to the frontier. For example, population pressure in southern Brazil in

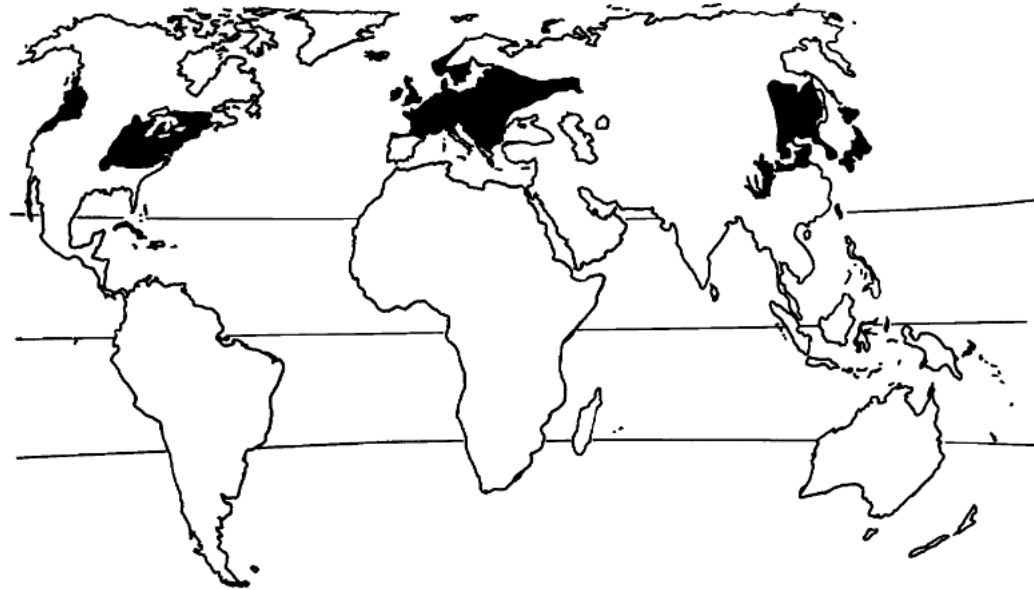


Figure 1: Main areas of the temperate forests across the northern hemisphere

the early 1970s was a principal factor in spurring colonist farmer migration to Rondonia and other frontier states” (Carr 2009).

1.5.4 Acid Rain

”The patchwork of forest has been a boon to research. On a tract southwest of the towns (image lower left), the Howland Research Forest is the site of long-term scientific studies supported by NASA, the National Science Foundation, the U.S. Forest Service, the U.S. Department of Agriculture, and the U.S. Department of Energy. Researchers have observed the effects of acid rain; examined the cycling of nutrients through soils; and continually measured how much carbon dioxide the trees absorb, store, and return to the atmosphere. The Howland Forest is also a key natural laboratory for observing long-term ecosystem changes” (NASA 2008)

Examples of ways humans have exploited the biome go in depth!

The American Crow

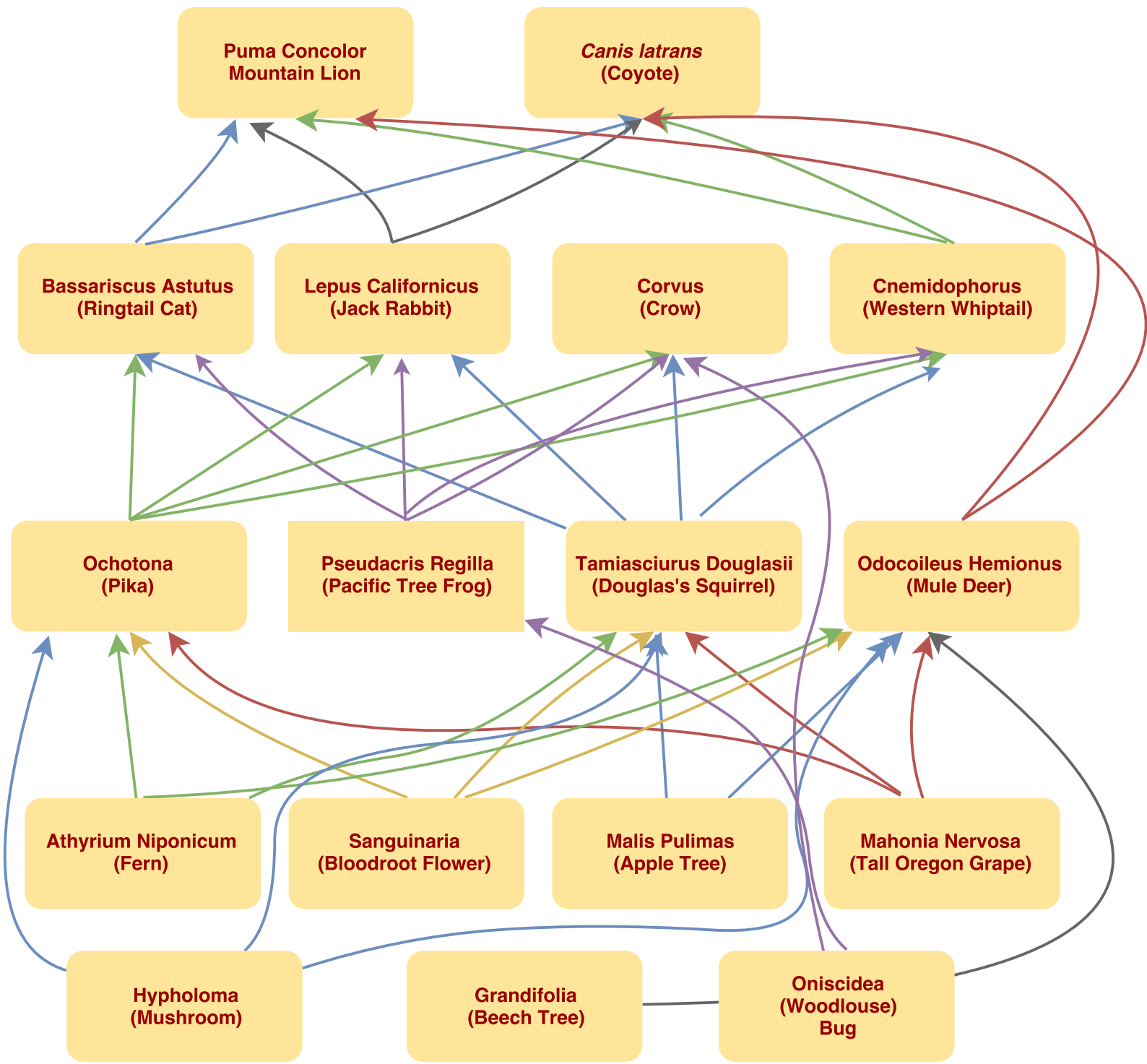
2 Food Web Diagram

Keystone Species is the deer.

Detritovores include the woodlouse and fungi or mushroom.

It's not shown in the food web, but the woodlouse and fungi are the final stages in the cycle.

see following page for food web diagram



10 animals - including at least two predators and two detritivores or decomposers.

This should include your chosen animal and a keystone species

3 Niches of Descriptions

3.1 Malisa Pulimas or The Apple Tree—Producer

3.1.1 Unique Behavioral Adaptations

3.1.2 Interactions with other species

3.1.3 Where Does it Live

3.1.4 How does it interact with its habitat

Unique physical or behavioral adaptations that allow it to survive in that biome. (examples - hibernation in bears, thick double fur coat of musk ox, etc.)

Particular interactions with other species (what species does it interact with as predators, prey, herbivores, competitors, symbiotic relationships).

Where does it live? (soil dwelling, tree dwelling, burrow, etc.)

What does it eat? How and where does it search for food?

How does it interact with abiotic factors in the habitat (soil, water, etc?)

Other important relationships within its habitat (include humans if present)

3.2 Odocoileus Hemionus or Mule Deer—Primary Consumer

3.2.1 Unique Behavioral Adaptations

3.2.2 Interactions with other species

3.2.3 Where Does it Live

3.2.4 How does it interact with its habitat

3.3 Corvus or The Crow—Secondary Consumer

3.3.1 Unique Behavioral Adaptations

3.3.2 Interactions with other species

3.3.3 Where Does it Live

3.3.4 How does it interact with its habitat

3.4 Canis latrans or The Coyote—Predator

3.4.1 Unique Behavioral Adaptations

3.4.2 Interactions with other species

3.4.3 Where Does it Live

3.4.4 How does it interact with its habitat

3.5 Oniscidea or Woodlouse—detritivore

3.5.1 Unique Behavioral Adaptations

3.5.2 Interactions with other species

3.5.3 Where Does it Live

3.5.4 How does it interact with its habitat

4 Literature cited