

John Muir Study Guide
Science Lesson Plan
Grade Four
John Muir on Unique Ecosystems

John Muir traveled throughout the world, and every place he visited he saw plants and animal species that could naturally be found nowhere else. Muir recognized that the combination of weather, climate, soil, and available water are important factors in determining whether a particular plant or animal species can survive in an area.

In each place John Muir visited he learned about the plants and animals that live in the region, and how they have adapted to their environment.

It was John Muir's ambition for much of his life to visit the forests of South America. One species of tree that was of particular interest to him was the *Araucaria imbricata* or monkey puzzle tree, an extremely rare species of tree that only grows high in the forests of the western slopes of the Andes Mountains in Chile. The tree had been given the name "Monkey Puzzle", as Muir explained in his journal, because "its prickly needles render ascent impossible to the monkey."

In November of 1911 he traveled by horseback into the high mountains of Chile with a small party of native guides, and there found to his delight the tree that he had been searching so long to find. Despite his age of 74 years, he climbed to the top of a 1,000 foot high ridge so he could walk among the trees for which he had been searching. He described the sight of this rare species of tree as "A glorious and novel sight, beyond all I had hoped for." He spent the day studying and sketching the trees and making notes about the ecosystem of which it is a part.