

Story of All Life II

Rockwood Middle School, TN



Watch Now

Great Smoky Mountains National Park is an example of how conservation and habitat management can positively change an ecosystem. Before the establishment of the park, human activity (e.g. clear-cut logging, hunting, pollution, invasive species introduction) dramatically reduced biodiversity in this region. Chestnut trees, bison, mountain lions, and gray and red wolves are no longer found within the park due to these actions. However, the native species remaining are now protected by the preservation of these mountainous habitats. Students who want to contribute to this legacy can educate others about the importance of natural areas, both in national parks and their local communities.

LIFE SCIENCE

4.LS2.4	Develop and use models to determine the effects of introducing a species to, or removing a species from, an ecosystem and how either one can damage the balance of an ecosystem.
6.LS2.1	Evaluate and communicate the impact of environmental variables on population size.
6.LS2.5	Analyze existing evidence about the effect of a specific invasive species on native populations in Tennessee and design a solution to mitigate its impact.
6.LS2.6	Research the ways in which an ecosystem has changed over time in response to changes in physical conditions, population balances, human interactions, and natural catastrophes.
6.LS4.1	Explain how changes in biodiversity would impact ecosystem stability and natural resources.

6.LS4.2	Design a possible solution for maintaining biodiversity of ecosystems while still providing necessary human resources without disrupting environmental equilibrium.
8.LS4.4	Develop a scientific explanation of how natural selection plays a role in determining the survival of a species in a changing environment.

EARTH & SPACE SCIENCE

4.ESS3.2	Create an argument, using evidence from research, that human activity (farming, mining, building) can affect the land and ocean in positive and/or negative ways.
6.ESS3.3	Assess the impacts of human activities on the biosphere including conservation, habitat management, species endangerment, and extinction.

ENGINEERING, TECHNOLOGY & APPLICATIONS OF SCIENCE

6.ETS1.1	Evaluate design constraints on solutions for maintaining ecosystems and biodiversity.
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The chestnuts were once one-in-four trees
But they all died in the 20th century
When we introduced a fungal disease
Lower diversity

Mountain lions used to freely roam here
But we killed them off in irrational fear
Now that top hunter is nowhere near
Lower diversity

Gray wolves killed off by us too
Red wolves same story; sad but true
The black bears almost went down too
Lower diversity

Elk were extirpated by our guns
Otters hunted out; come on, that's no fun
Even bison from the mountains were run
Lower diversity

Written in these hills
Are the stories we now can explain
Seventeen hundred vascular plants in this
range

The amphibians have forty four kinds that call
this home
Two hundred forty birds that fly, forty reptiles
right here, they roam

And they'd be gone, gone into the night
If the ground beneath them we hadn't had the
foresight
To protect every little kind of life
What a thoughtful dream

The story of all life
It gives us hope
And we know it's right
To keep it going
That's right

Keep it going

The story of all life
We give it hope
The circle goes
The chain unbroken
That's right
The story of all life

Walking in these hills
Are creatures that are not yet named
But we keep the door open
By protecting this place for future days
Eighteen thousand species now
How many thousands out there still?
What an adventure, keep on discovering – we
will

And they won't be gone, gone into the night
The ground beneath them, we've given species
the right
To keep on with their adapted ways of life
What a thoughtful dream

The story of all life
It gives us hope
And we know it's right
To keep it going
That's right
Keep it going

The story of all life
We give it hope
The circle goes
The chain unbroken
That's right
The story of all life