



# YALE NATIONAL INITIATIVE

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Curriculum Units by Fellows of the National Initiative

2022 Volume V: Floods and Fires, How a Changing Climate Is Impacting the U.S.

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## **Will They Survive? Climate Change and its Impact on Biodiversity**

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by Robert L. Boughner

Climate change is going to have massive impacts on everything that we do in the future, and biodiversity is going to be particularly impacted. Animals that have been well-adapted to their ecological niche face major changes to their habitats, alterations of their food sources, and new invasive species. These animals face a challenge: somehow adapt to the new environment, shift their geographical range, or go extinct. Many examples of each will be seen in the future.

This month-long unit was written for Middle-School Science classes as well as Biology. It is used to supplement teaching on natural selection. Traditionally students are taught about the processes of natural selection and about how nature selects individual traits (adaptations) that allow the animals to survive and reproduce in their specific ecological niche. This unit asks students to consider how specific animals will be impacted by climate change and potential outcomes for the species.

(Developed for Science, grade 8; recommended for Science, grade 8, and Biology, grade 9)

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