

New Jersey Farming and Climate Change

A lesson in the NJAITC Climate Change Series

OVERVIEW: Students learn how New Jersey farmers are adapting to the changing climate brought about by global warming.

GRADES: 2-5 (*This lesson can be modified for younger grades.*)

OBJECTIVE: Students will be able to:

- Describe how the climate is changing in New Jersey.
- Describe how changes in the climate impact crops grown in New Jersey.
- Describe the actions farmers are taking to offset weather changes.



MATERIALS:

The NJAITC powerpoint presentation: *New Jersey Farming and Climate Change*

Optional: the book *Understanding Climate Change, Facing a Warming World*, by Melissa McDaniel

BACKGROUND

Global warming has been impacting the state of New Jersey at a faster rate than the world as a whole. Temperatures in New Jersey have increased 4°F since 1900 compared to the worldwide increase of 2°F. This warming has increased the intensity of storms causing flooding and also has increased periods of drought. Early spring weather is particularly volatile, with temperatures rising and falling dramatically. NJAITC's powerpoint presentation *New Jersey Farming and Climate Change* walks students through the reasons for climate change and the specific impacts on New Jersey crops, and shows students the actions New Jersey farmers are taking to adapt to this changing climate.

PROCEDURE:

Ask students if they know some food crops that are grown in New Jersey. Tell them that farming, also called agriculture, is the third largest industry in New Jersey, and that 100 different types of fruits and vegetables are grown here in the Garden State. Tell students that today we are going to view a slideshow that will show them how global warming is changing the climate in New Jersey and what impact that has on the crops grown here.

Show and discuss the NJAITC powerpoint presentation: *New Jersey Farming and Climate Change*.

EVALUATION: In small groups or as a class, ask students to list and discuss the changes that global warming is having on the climate in New Jersey. Ask them to list and discuss the impact the weather changes have on New Jersey crops and the actions farmers are taking to offset climate change. Ask students if they think these actions will work in the long-term and ask them to suggest other things farmers might do to protect their crops.

EXTENSION:

Learn about farming in New Jersey by reading *From the Garden State to Your Plate, Farming Fruits and Vegetables in New Jersey*. Discover New Jersey's top crops and where they are grown. Click [here](#) for a digital copy of the book, available on the NJ Agriculture in the Classroom website.

Read *Understanding Climate Change, Facing a Warming World*, by Melissa McDaniel

New Jersey Learning Standards

Climate Change Education:

Comprehensive Health and Physical Education: 2.1.2 CHSS.4

Science: K-LS1-1, K-ESS2-2, K-ESS3-3, 3-LS4-4, 3-ESS3-1, 4-ESS3-2

Social Studies: 6.1.2.GeoHE.1, 6.1.5 GeoHE.3