

Intro to Agriculture

Agriculture, growing plants and raising animals, is important to New York State. About 23% of the state's land areas is used by the 33,400 farms. The majority of these farms (96%) are family-owned.

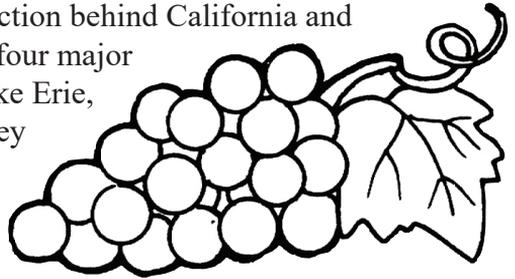
Milk is New York's leading agricultural product, ranking the state third in the United States for milk production.



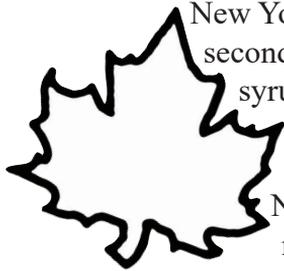
New York ranks second in the nation for our production of apples. Our leading varieties are McIntosh, Empire, Red Delicious and Golden Delicious.



Grapes, for juice and wine, place New York third in US production behind California and Washington. The four major grape producing areas are near Lake Erie, the Finger Lakes, the Hudson Valley and eastern Long Island.



New York also ranks second in maple syrup production behind Vermont.



Farmers in New York grow many other crops and raise

birds and animals too! For more about NYS agriculture look for the following features:

- **Two Farmer Profiles,**
- **A Production Profile,**
- **An Agriculture Crossword Puzzle and Word Search**
- **And a Kid-Friendly Recipe to Try at Home!**

Newspaper Activity: Look through the newspaper (print or electronic) for stories, pictures or ads that show examples of New York State agriculture.

How many examples did your class find?

Agriculture Literacy

Meet Sarah Meyer

Pictured here in her beekeeper suit is Sarah Meyer with a few of her bee colonies. Sarah didn't grow up on a farm, but her father was a farm worker. She became



a beekeeper out of curiosity and because it connects her love of food, agriculture, gardening, and nature. As a beekeeper, she has made stronger connections with nature and people within her community.

All three of the hives pictured with Sarah are made up of two hive boxes. Inside these boxes the bees make their own system of wax cells called, honeycomb. The honeycomb

is composed of a series of hexagonal, or six-sided, cells that are used to store the hive's honey, pollen and bee larvae.

During the winter months the bees are still very much alive and moving around, even flying on days warmer than 50 degrees. When it's colder, the bees form a cluster and flap their wings fast to warm the center of the hive to about 65 degrees. The worker bees rotate from this inner core where their queen is kept warm and safe to the outer parts of their hive to eat honey and get food to feed the queen. Sarah checks on her hives to be sure they have enough to eat and if necessary, she will feed them until the spring when her honey bees can leave the hive to gather fresh pollen and nectar.

Worker's Ransome Honey - Because Sarah

doesn't live on a large property, she places hives on nearby farmland in the Finger Lakes region. She harvests and sells raw honey and beeswax sourced from her individual, single hives. The honey is never mixed, combined, diluted, or heated making each jar of raw honey a seasonal snap shot of each hive's location. For more information go online to <http://workersransom.com>



Fun Fact: Honey bees will only sting to protect their queen and the hive and once a honey bees stings, it will die.

Newspaper Activity: Look through the newspaper (print or electronic) for stories, pictures or ads about agriculture. Did you find any examples of people growing plants or raising animals or working with nature?

Agriculture Literacy

Meet the Yanceys

Pictured here is the Yancey family. Haskell and Jane Yancey currently live and work on the farm and sugar bush that was established by Haskell's great-great grandfather, Peter, in 1844. The Yancey's three children, son-in-law and two grandchildren all help during the peak of the maple sugaring season. They'll tap about 4,500 trees and collect sap traditionally, using buckets, and using a more modern tubing method. A new tap is made in each



tree every year. The sap in their 1,500 buckets are collected by hand using a team of horses to bring it to the boiling shed. The shed has two wood-burning evaporators that are used to boil and reduce the sap down to make maple syrup. On average, it takes 40 gallons of sap to make just 1 gallon of syrup.

The exact timing of the season is mostly controlled by mother nature. The sap runs best in Spring, when there are a series of days and nights of freeze and thaw. When the sap is running it takes a lot of family, friends and long hours to collect and make the syrup for the season.

Yanceys' Sugarbush

A sugar bush is a forest of trees used to make maple syrup. The Yanceys sell their syrup by the gallon, 1/2 gallon, quarts and pints. For more information about the Yanceys visit their Facebook page at <https://www.facebook.com/yanceys.sugarbush/>



Fun Fact: Tim Yancey (Haskell and Jane's son) runs the dairy farm at Yancey's. The milk from their dairy is sold and taken to Kraft-Heinz's processing plant in Lowville. There the milk is used to make Philadelphia Cream Cheese or string cheese.

Newspaper Activity: Look through the newspaper (print or online) for stories, pictures or ads about industry, or types of businesses, in your community. How many have ties to agriculture? Did you find any involving maple syrup or cheese? **Lesson Extension:** Research and compare and contrast the agricultural technologies for a farm of 1844 to those of today.

Agriculture Literacy

Cheese and Yogurt Production

Valley View Cheese is a 62 farm coop in western New York. Sixty of the coop farms are Amish run with an average of 15 cows at each dairy farm. The Amish do not have electricity on their farms or use tractors and still rely on horses to



help with the heavy work. They milk their cows by hand and gather it in milk cans. Each milk can weighs about 100 pounds when full. The cans of milk are brought to Valley View for processing. The factory takes in between 26,000 to 30,000 pounds of milk every day. Each can is tested for bacteria and antibiotics. The milk that passes testing is combined in one tank for

pasteurization where it is heated to over 185 degrees. From there it's bottled to sell as milk or used to make cheese curd or yogurt. Valley View makes plain, chive, horseradish, hot & spicy and smoked curds, as well as 6 flavors of yogurt. All their products are 100% natural with no preservatives. They sell milk, cheese and yogurt in their factory store and at small family-owned businesses from Buffalo to New York City. Visitors to their factory store will also find Amish made jam, jellies, quilts, furniture and toys for sale.

This information was provided by Eric Hastings who lives on a farm with his wife and two young sons. They raise goats and cows on the farm that is part of the coop. Eric works as the operations manager for Valley View which produces fluid milk, cheese curd and yogurt in the heart of the Amish Trail.

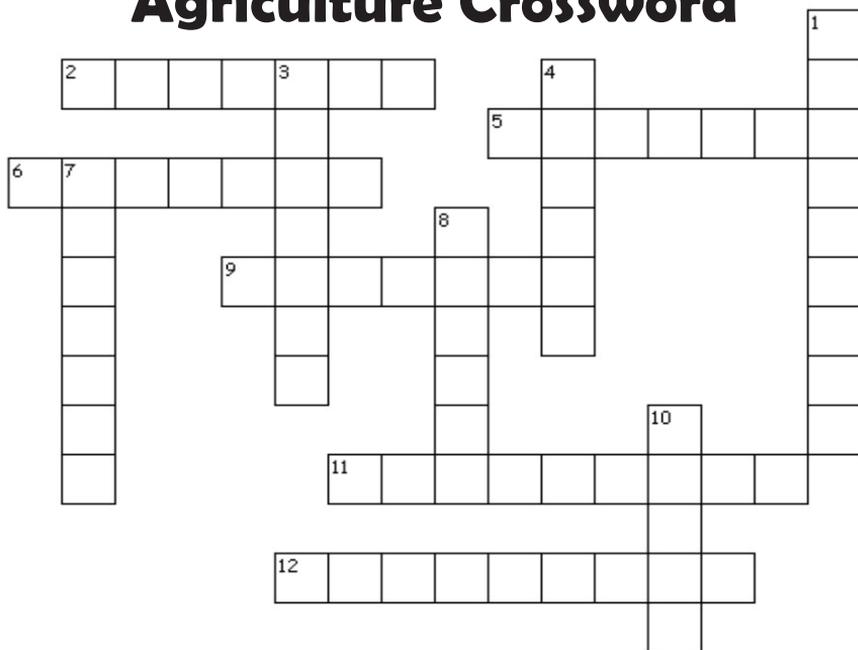
Valley View Cheese - Located on Route 62 in Conewango Valley, NY, this Amish-owned dairy facility was originally established in 1962 but an upgraded factory is scheduled to be completed in March 2020. For more info visit them on Facebook at <https://www.facebook.com/Valley-View-Cheese-Co-Inc-105520476181873/>



Fun Fact: Fresh cheese curd is often called “squeaky cheese” because of the squeaky noise it makes when people eat it!

Newspaper Activity: Eric Hastings grew up dairy farming, giving him skills and knowledge to grow into the position he has today. Look through the newspaper (print or electronic) for stories, pictures or ads about jobs or careers you might like to have some day. What type of experiences or education would you need to become the best you can be? Did anyone in your class pick a career in agriculture?

Agriculture Crossword



Use the clues below to fill in the agricultural words.

Across

2. Long, narrow ditch for planting seeds
5. Gathering of ripe crops in a season
6. To make or manufacture: to grow (verb); the product of gardening: fruits and vegetables (noun)
9. Grassy land where animals graze
11. Move/carry fine yellow powder to plants to fertilize seeds
12. Person who buys products/services

Down

1. Ingredients that help people, plants and animals grow
3. Piece of land planted with fruit or nut trees
4. Person who runs/owns land for growing crops or raising animals
7. Person on a large farm where cattle, horses or sheep are raised on an open range
8. Unit of measure (grain, dry products)
10. Business selling milk, cheese and butter; farm where cows or goats are raised

WORD BANK:

BUSSEL

CUSTOMERS

DAIRY

FARMER

FURROWS

HARVEST

NUTRIENTS

ORCHARD

PASTURE

POLLINATE

PRODUCE

RANCHER

For more vocabulary lists and puzzles go to www.myvocabulary.com

Agriculture Literacy

Agriculture Word Search

E M E H J I S O B T R E M H D
V V V R X O R C S U G X S U E
I R A W U C S E H N S R X W D
T A C P H T V R D E A H M L I
I D I A O R S A E M D O E W C
S H R I A R Q A Y M B U R L A
N D F H X N A R P R O K L P T
E S T N E I R T U N G T O E I
S O I L S E N S O R S L S H O
K D J U B J B Y A R L B X U N
R A Q N E B Z N E I S S J S C
R I A A T B C M N C I T R U S
L R M I P H R A E C U D O R P
C Y D Q E A T F U R R O W S I
I C N R F E K N O W L E D G E

Find and circle the agricultural words listed below:

BUSHEL

CITRUS

CRANBERRY MARSH

CUSTOMERS

DAIRY

DEDICATION

EVAPORATORS

FARMERS

FURROWS

HARVEST

KNOWLEDGE

NUTRIENTS

ORCHARD

PASTURE

POLLINATE

PRODUCE

RANCHER

SCHEDULE

SENSITIVE

SOIL SENSORS

Newspaper Activity: Select a story from the newspaper (print or electronic) that is interesting to your class. Use the important words from the story to make a new word search or crossword puzzle. Give yourselves extra credit if the story has any connection to New York state agriculture.

To learn more about NYS agriculture go to www.agclassroom.org/ny/

For more vocabulary lists and puzzles go to www.myvocabulary.com

Recipe: Maple-Yogurt Smoothies

Recipe by Ken Haedrich, Maple Syrup Cookbook

Here's a kid-friendly idea to have fun making a healthy meal or snack



Ingredients:

- 1 c. plain yogurt
- 1/2 c. milk
- 1/3 c. pure NYS maple syrup
- 1 ripe banana peeled
- Pinch of cinnamon
- Several ice cubes crushed

Instructions:

Combine the yogurt, milk, maple syrup, banana, and cinnamon in a blender. Add the crushed ice and process until smooth. It's fine if pieces of ice remain after blending. Makes 2-3 servings. Serve at once.

Recipe reproduced with permission of
NYS Maple Producers Association

To learn more about mapling, explore the educational resources available for K-6 at

www.nysmaple.com/educational-resources/ or visit the

International Maple Museum Centre

9756 State Route 812, Croghan, NY 13327

Go to maplemuseumcentre.org for more information and museum hours

To learn more about

New York State's Agriculture in the Classroom Program

go to www.agclassroom.org/ny/

Newspaper Activity: Look through the local newspaper (print or online) and other sources for recipes that use fruits, vegetables, animal or dairy products from New York State as ingredients.

Healthy Tip: Including several daily servings of fruits & vegetables as part of an overall healthy diet may lower the risk of heart disease and certain types of cancer.

Source: www.choosemyplate.gov