NH Agriculture in the Classroom has a library full of resources for teachers to help you integrate agricultural topics into your curriculum. Some resources are complete manuals with detailed lesson plans and links to state and federal curriculum standards. On other subjects we have a wealth of information about the topic, which can help you develop your own lessons. In addition to informational material, we have videos and story books related to some themes. We are constantly working to update and enhance our resources. If there is a particular topic you are looking for and don't see it in our list, let us know. We may be able to help you locate some resources or we may want to add a new unit to our collection.

In addition to physical materials for loan or sale, in-class presentations and/or staff development workshops can be conducted on many of these subjects.

### **Lending Policy**

The following resources are available on loan from NH Agriculture in the Classroom. They can be picked up in person at the Concord office or in most cases mailed. Shipping and handling costs are charged for all mailed materials. A refundable security deposit is also required for all materials (fee varies with materials).

#### Alpacas

*Alpaca begins with A* is a curriculum guide including lessons about alpaca fleece and how it is different from other fibers, alpaca behavior (including their habit of humming), alpaca care and feeding, and some history of their origins. Appropriate for grades K-2. In person pick up is required for this kit due to its size.

#### Apples

"A is for Apples" includes activities for classroom learning, lists of local orchards for field trip ideas, story books about how apples grow and a video that explores the history of apple growing. Lessons relate to math, science, history, and literature. Appropriate for grades K-6.

# **Agriculture: Touching Our Lives Every Day**

This resource manual provides lessons that increase awareness of farming, career opportunities and agricultural products. It uses educational techniques including puppets and plays, puzzles and games and is appropriate for grades 3-6.

#### **Bees and Honey**

The Honey Files Kit includes a 98-page booklet of lessons and activities about bee biology, behavior and importance; a DVD or VHS presentation about bees, a color poster comparing bees to similar insects; and a list of beekeeper associations in New Hampshire. The kit is appropriate for grades 4-6 but other bee resources are available for younger students. (This kit may be borrowed for free or purchased for \$25)

#### Biotechnology

We can help connect you to available resources.

# **Careers in Agriculture**

The *Faces of Agriculture* lessons help students identify who is responsible for producing their food and fiber and explores hundreds of career opportunities that exist within agriculture and related fields. Appropriate for grades 5-8

#### **Chickens and Eggs**

The *Beginning of Life* booklet is a detailed manual about the biology and embryology of chickens and eggs. It is written as a guide for educators but could be used by high school students studying biology. Other materials available include stories about chickens and egg development, lesson plans for younger students and materials to assist with an incubation project. We also loan incubators (security deposit required).

# **Christmas Trees**

The Christmas Tree Education Kit contains lessons about the history of Christmas trees, how to identify different species, what's involved in raising them, and how to find Christmas tree farmers in NH. Math, language arts, social studies and science lessons are included. Appropriate for grades 3-8

### **Cows and Dairy**

NHAITC has a broad spectrum of resources related to cows and various dairy products. *Dairy Farming Then and Now* is a kit designed for 4<sup>th</sup> grade to connect with NH History lessons. *Grass to Milk* is a unit which includes a CD-rom and lessons about how cows produce milk. Various stories and booklets explore cheese making, ice cream, butter and other products.

# Farm Animals

*Exploring Farm Animals* includes information about a wide variety of animals, what they are used for (food, fiber, work, etc.), appropriate vocabulary, different breeds, and care of animals. This booklet contains games and various activities appropriate for grades 1-3.

#### **Farmers Markets**

*All About Farmers' Markets* is a teaching guide for classrooms, camps and community programs. It includes activities to help children think about where their food comes from, how to make good food choices and of course reasons for and tips on visiting a farmers' market. This is more than just about one place to buy food; it looks at food systems and nutrition in a creative way. Appropriate for grades 1-6

#### **Food Science**

*Science in Your Shopping Cart* explores some of the scientific research that is conducted to increase crop yields, provide new varieties of plants, counteract diseases and pests, and address food safety concerns. This booklet is appropriate for middle and high school students.

# Food – Where does it Come From?

Students will learn what ingredients go into various foods they eat, how food is raised, distribution patterns, etc. Appropriate for grades 1-6

### **Gardens – How Does Your Garden Grow?**

This unit provides resources for starting school gardens and using gardens as outdoor classrooms. School gardens are appropriate for all ages.

# Grains:

# Corn

"Amaizing Corn" resources teach about the many uses of corn, some of its history and how it is raised. Math, history, language arts and science lessons are included in this packet. Appropriate for grades 1-6.

# Wheat

"From Wheat to Bread" provides historical information about wheat, how and where it is grown and processed, microbiology and chemistry of bread (yeast, enzymes), recipes and student activity sheets. Appropriate for grades 3-6.

### History – NH Agricultural History

Designed to compliment NH History lessons, this unit looks at the role of agriculture among European settlers and colonists on through the development of the Industrial Revolution. Students gain a sense of New Hampshire's agrarian past and how it shaped our state. Appropriate for grades 3-5.

#### Insects

This unit provides resources on insect identification, the role of insects in agriculture (friends and foes) and explores life cycles, and general insect biology. Appropriate for grades K-8.

# Maple Sugaring

*The Maple Sugaring Story* is a guide for teaching about the maple industry. It contains history lessons, information on maple production, science lessons about tree identification and physiology, math, writing, art and music activities and recipes for sweet treats. Appropriate for grades P-6.

#### Mushrooms

*Fresh Mushroom Quest* is a cooperative learning packet that teaches about fungi as food and decomposers. It includes instructions for growing edible mushrooms, lessons about reproduction, development and nutrition. This is an interdisciplinary packet covering everything from art to science. Appropriate for grades 4-5.

#### Pigs

Resources include "A New Look at Pork" educational packet about where pork comes from and how to enjoy it. Handouts explore other pig products. Stories give a view of life on a pig farm.

# Plants

A wide variety of resources provide information on general plant biology, parts of plants, plant characteristics, growing and using plants. There are also units on general plant propagation and horticulture. Appropriate for grades 1-8.

### Poinsettias

This unit uses poinsettias to teach about plant propagation, integrated pest management, plant origins and history, economic impacts of horticulture, career opportunities and more. It is correlated to NH Science Frameworks and includes math and science lessons. Appropriate for grades 4-6.

### Pumpkins

This packet uses pumpkins as a way to teach about plant life cycles, problem solving skills, estimation, measuring and also artistic and literary skills. Story books are included as well as hands-on activities and culinary projects. Appropriate for grades 1-4.

### Sheep & Wool

The Wooly Wool Kit contains a manual for using inquiry to teach about the sheep industry. Students investigate the properties of wool through experiments, learn about dying and how wool is made into yarn. The kit contains all of the materials necessary to conduct the experiments and projects. These kits are available for sale as well as for loan. They must be picked up in person due to the size. Appropriate for grades K-2.

### Soil

There is a wide variety of material for all ages on soil. Soil formation, structure and texture, maps, relationship with water, life in the soil, importance to agriculture and many other topics are covered in our soil resources. Appropriate for grades K-12

# Turkeys

We can help connect you to available resources.

# Worms & Composting

Resources include instructions for creating in-class worm composting bins, using worms as a way to teach about anatomy, animal behavior, recycling, and life in the soil. Lessons are interdisciplinary and engaging. Kids love worms! Appropriate for grades K-8.

Торіс	Pre-K	1-3	4-6	7-8	9-12
Alpacas	*	*			
Apples	*	*	*		
Agriculture		*	*		
Bees	*	*	*		
Careers in Agriculture			*	*	

#### Appropriate Grade Level chart

Chickens/Eggs	*	*	*	*	*
Christmas Trees		*	*	*	
Cows & Dairy		*	*		
Farm Animals		*	*		
Farmers' Markets		*	*		
Food Science				*	*
Food Sources		*	*		
Gardens	*	*	*	*	*
Grains		*	*		
History			*		
Insects	*	*	*	*	
Maple	*	*	*	*	
Mushrooms			*		
Pigs		*	*	*	
Plants		*	*	*	
Pumpkins		*	*		
Sheep & Wool		*			
Soil	*	*	*	*	*
Turkeys		*	*		
Worms & Composting	*	*	*	*	