**DATE:** August 7, 2001 **GROUP:** 5-8

TIME: 60 minutes ACTIVITY: Walking Tour of Apple Orchard

# TERHUNE ORCHARDS SAMPLE LESSON PLAN

**SUBJECT:** Integrated Pest Management

**LESSON SUMMARY:** Apples are one of the most popular fruits in the world and will live about 35 years if properly nurtured. Students will gain a foundation and basic understanding of agronomy, pomology, and disease and pest management, all necessary to achieve optimum apple quality and production.

## **OBJECTIVES:**

- To gain familiarity with the apple tree and the process of production
- To introduce students to the scientific fundamentals of weed, disease and insect management
- The students will learn about alternatives to pesticides
- Students will determine when the use of pesticides is responsible management
- Students will learn about the life cycle of apple trees and their pests

TOPIC	DISCUSSION ACTIVITIES	TIME
LOCATION	Geographic Location	
	Climate	10 minutes
	Soil Type	
	Air Circulation	
THE APPLE TREE	Market Demand	
	Maturity for Harvest	10 minutes
	Standard vs. Dwarf	
	Source of Nursery Stock	
IDENTIFICATION OF PESTS	Weeds	
	Disease	5 minutes
	Insects	
	Scouting	
WEATHER	Data Collection	
	Data Analysis	5 minutes
	Satellite Monitoring	
MANAGEMENT	Pruning	
	Thinning of Fruit	10 minutes
	Determination of Best Practices	
HARVEST	Washing	
	Grading	10 minutes
	Packing	
	Storage	
WRAP-UP	Discussion	
	Questions	10 minutes
	Advantages of Integrated Pest	
	Management	

### - TERHUNE ORCHARDS CONTINUED -

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### SAMPLE LESSON PLAN

### **EXERCISE:**

- 1. List the various pests of apples.
- 2. Discuss what factors will influence the use of controls.
- 3. Discuss why orchardists prune tree limbs.
- 4. Discuss why orchardists thin the fruit.
- 5. What are the advantages of Integrated Pest Management?
- 6. List other crops for which IMP can be used?

### **RESOURCES:**

Terhune Orchards, <a href="http://www.terhuneorchards.com/">http://www.terhuneorchards.com/</a>

International Apple Institute, McLean VA

U.S. Apple Association, www.usapple.org

NJ apple varieties: <a href="http://www.state.nj.us/agriculture/appletypes.html">http://www.state.nj.us/agriculture/appletypes.html</a>

NJ apple facts: http://www.state.nj.us/hangout/apple.html

National Integrated Pest Management Network

http://www.reeusda.gov/nipmn/

\*\* University of Kentucky Integrated Pest Management Manuals and Fact Sheets

http://www.uky.edu/Agriculture/IPM/manuals.htm

\*\* NIPM - Northeast Region

http://www.nysaes.cornell.edu/ipmnet/