

Dear teachers,

I hope that you have found this magazine useful and enjoyable. The information presented in this magazine can be used to supplement your lesson plans or create new lessons. The following activities are designed to help your class better understand the issues presented on pages 1-15 and to encourage young readers to become actively involved in learning about forests, nutrition and the environment around them. The model activities outlined below are designed to be practical, thought provoking, flexible and fun. You may choose appropriate exercises and modify them to best suit your student's needs and local conditions. Many teachers design their own new projects based on the sample activities. It is recommended that you review the magazine thoroughly with your class before conducting the exercises. If possible, make past issues of EarthBird available to the students as reference material.

Sample Activities

1) Community survey. In this activity, students conduct a survey of forest products used to assist good nutrition in their community. With your students, develop a short list of survey questions. The questions should help the class determine: a) Which locally available forest and tree products contribute to good nutrition; b) The origin of those products; c) Their value to the community; d) The seasons in which they are available; and e) When they were first discovered and used. Remind your students to include questions about products that are used to assist in animal husbandry, agriculture and food preparation.

When a list of questions has been agreed upon, ask your students to survey a variety of community members. Encourage students to interview their grandparents and other senior citizens. Emphasize that elders are a great source of information.

When the surveys are complete, discuss the findings with your students. You may want to record them on the chalkboard. It may be helpful to discuss the nutritional significance of the forest foods listed. For example, if bananas are on the list, you may discuss their value as a staple, snack food and a source of vitamins and energy for the body. Then discuss what other roles the tree plays in providing good nutrition (hint- fertilizer and fodder)

Your class may use the survey results to make a chart of forest products, their nutritional value and their role in the community. The chart would be a good reference for the classroom wall. See the class project on the next pages for more ideas.

2) Creating a plan for a good diet: In the first exercise the class determined which forest foods are common to the community. They learned how locally available forest products contribute to good nutrition. With the information from the survey, the class can plan a balanced diet which makes use of forest foods.

a) Refresh the class on the basic principles of good nutrition. Ask them which types of foods can help make up a healthy diet. Discuss the types of *non-forest* foods which are available in your area. Provide your students with any reference material that they may need.

b) Tell your students that they will be planning a balanced diet. With your class, compile a complete list of locally available foods. Remind students to include forest foods from the survey. It may be helpful to list the foods on the chalkboard. Ask the students to help you group the foods by columns that best represent their nutritional contribution. For example, you may divide the list into simplified categories such as *energy foods* (food primarily composed of carbohydrates), *growth foods* (foods rich in protein), and *foods for protection* (foods that provide vitamins and minerals). It may be useful to invite a health worker to visit your class and talk to your students.

c) Divide the students into groups of three. Discuss the list with your class and ask each group to plan a simple, one-week diet. Remind them that the diets must have a wide variety of foods from the list and the diet must be well balanced. Answer any questions that they may have and collect the diet plans when they are completed. You may want to choose a few of the plans to discuss with the class. Discuss the merits of each plan and highlight the value of forest foods.

3) Mathematics exercise. Students can learn more about forest products and simple income generating projects through simple mathematics.

Choose a popular forest food from the information gathered in the survey and construct simple math exercises based on your selection. Mathematics exercises can make students more aware of a variety of forest products themes. Please review the sample activity below and devise appropriate math activities for your students.

Sample exercise, "Nuts!" : Suggest to your students that in an imaginary village of 120 people, each person needs 4 bags of nuts a month to balance their diet. The trees which produce the nuts each provide 200 bags of nuts year. Ask the students to determine.

- How many bags of nuts are consumed by each person in a year?
- How many bags are consumed by the community in a year?
- If there are 50 nut trees in the village, how many bags of nuts can they produce?

- d) If 25% of the nuts are needed to grow new trees, how many bags of nuts are available to the village?
- e) If 50 people move to the village, how many new trees will be needed to feed them?
- f) If the nuts were not available, each family may have to substitute a kilo of meat or fish per month as a source of protein. Estimate the cost for each family based on the cost of meat and fish in your area.

Questions may be expanded to include the production and sale of forest products and the effects of cutting the trees for timber and firewood. You can develop problems and solve them with your class.

Example: Given 60 nut trees and 170 people, please determine:

- a) If 1/3 of the trees were sold for firewood and timber at the price of 600 shillings per tree, how much profit would the community make?
- b) Would there be enough trees remaining to feed the community, if 25% of the trees are needed to grow new trees.
- c) If not, how much of the earnings from tree cutting would be needed to purchase meat for the community annually? How much profit would remain?

Note: In the exercise you develop, you may want to include other costs such as permits, labour, transportation or land leasing.



4) Visit to a Producer of Forest Foods. Students may benefit from visiting a local producer of forest foods. Locate a company, individual or organization that harvests forest food in your area. Ask if your class could conduct a field trip to see a demonstration of the harvesting and/or processing. Explain that your students have been studying forest products and ask the harvester to speak to the class about the foods that he or she produces. Your visitor may talk about the history of his/her business and the importance of forest products. If your class cannot arrange a trip, ask the producer to visit your classroom.

5) Essay writing and discussion. Essay writing can help students think creatively and form strong, independent opinions. There are many forest food themes that students may find interesting about which to write. Review the sample activity and develop a writing exercise for your students.

a) Sample activity; Ask your students to write a short story based on how their nutrition would be effected if the forests and trees were destroyed. The students should suggest actions they can take to learn more and help protect forest resources.

6) Forests & nutrition vocabulary list. It may be a good idea to create a vocabulary list of terms used in the magazine and the class discussion. Encourage students to ask questions about words of which they may be unsure. Keep a record of the words and definitions for your class. You may want to include local terms and names for each word.

Sample vocabulary entries:

- **Nut:** A hard shelled fruit, e.g. hazelnut, cashew, Brazil nut.
- **Sap:** Any plant juice or fluid, sometimes made into food products like oils.
- **Fodder:** Feed for livestock
- **Malnutrition:** Poor nutrition due to a lack of food or a poorly balanced diet. People that eat too much fat can also be malnourished.

7) Additional information and assistance. You can get additional information on forests and forest products. Your local forest department should be able to provide information and advice. For information on health and nutrition, contact a representative of the health department. They may be able to provide information on healthy diets, nutritional deficiencies and food related diseases. A representative of the department of agriculture may also be of assistance when searching for information on food and nutrition.

Non-governmental organizations will also be happy to assist you with health, nutrition and forestry information. Find out which ones operate in your area and what they do.