School garden program increases student’s interest in eating fruits & vegetables

The Situation
The residents of the Coeur d’Alene Reservation have historically grown their own fruits and vegetables however with loss of land ownership and other factors over the last 50 – 100 years, the practice of gardening has been reduced. A local group, the One Sky One Earth Food Coalition, has identified health issues related to dietary options as an important community issue. Childhood obesity and Type 2 diabetes have been increasing nationally in the general population and at alarming rates in Native American communities. The Coeur d’Alene Reservation youth follow these trends. Dietary changes are a key, along with physical activity, to individual effectiveness in reducing obesity and preventing or reducing the effects of diabetes. Increasing children’s interest in eating fresh fruits and vegetables is a key factor in the long-term health of the community. Further, the loss of individual health and productivity and need for medical services in the future have broad, long-term economic costs.

Our Response
Extension Educator, Iris Mayes, 4-H Program Coordinator, Cheryl Lockard and One Sky One Earth Food Coalition Educator, Becky Walrod collaborated with the Lakeside School District, to manage and implement a school garden program. The Lakeside School Garden with nine beds and a small greenhouse, funded through the Food Coalition, is in its third year of operation.

During the 2012-13 school year, nutrition and gardening education were conducted during the school day with elementary students Preschool through 3rd grade on a weekly basis during Spring semester for the second year. This program served over 120 students. Each weekly program is one hour with each grade.

4-H Gardening and Cooking projects were also implemented during 4-H Afterschool at the Lakeside Elementary School “Success Center” (2nd through 5th grade) and in the Middle School Afterschool Program, “Strengthening the Spirit” (6th through 8th grade) during the 2012-13 school year. The Elementary Afterschool Program enrolled 60 students with 20 participating in gardening and cooking projects. The Middle School Afterschool Program has 24 students enrolled with 8 students participating in gardening and cooking. Students in both programs were given the choice of 4-H topics and voluntarily chose gardening and cooking. The 4-H clubs work on their projects for one hour per week and additional hours to complete their record books and presentations. Both school day and afterschool programs are planned to continue in future years. In both pro-

4-H Gardeners rake soil in a raised bed at the Lakeside School Garden, May 2012. C. Lockard
grams, students spend time in the garden working in garden beds, learning about soils and gardening processes such as fertilization, bed preparation, seed germination, and composting. Crops grown include salad greens, beets, potatoes, carrots, strawberries, onions, and garlic. Classroom time focuses on nutrition and cooking with fresh foods. Recipes have included various salads, microwave “baked” potatoes with broccoli and many others. The students are instructed in the underlying, grade-appropriate science concepts. All 4-H participants are given a certificate after each semester and their projects showcased at a culmination dinner, “4-H Family Night.”

**Program Outcomes**
The garden program has had the following results:

- Lakeside students reported to teachers that they prefer fresh fruits and vegetables and ask for those at the store when shopping with family members.
- The students are proud of the produce they have grown and take home with them after harvest. Students and parents reported that the students have used their new cooking knowledge at home to cook from the garden produce.
- Students that had participated in the school garden and attended the weekly farmer’s market took home produce in the summer and fall from the market.
- Several gardening students sold fruits at the farmer’s market they had picked on their own.
- Approximately 150 pounds of produce were grown during the 2013 growing season at the school garden.
- Students are learning the connections between the land, growing food and their own health and nutrition, as well as the connection to the community.

**Summer Camp**
Local youth also participated in gardening and cooking during summer camps in 2012 and 2013 utilizing the school garden. They expressed an increased understanding of healthy living concepts such as hand washing and nutrition choices when surveyed at the end of summer camp 2013.

**The Future**
The success of the gardening program has created a collaborative environment with the school district. The School Board recently approved construction of a nature trail that connects with the school garden. Future plans include increasing adult volunteer 4-H participation. Grant applications have been submitted to fund improvements to the school garden such as fencing, installing an irrigation system, and building attractive, edible landscaping in front of the school.

**Cooperators and Co-Sponsors**
Lakeside School District
One Sky One Earth Food Coalition

**FOR MORE INFORMATION**

**Iris Mayes,** Extension Educator  
University of Idaho Extension, Coeur d’Alene Reservation  
PO Box 29  
402 Anne Antelope Drive, Suite 8  
Plummer, ID 83851  
Phone: 208.686.1716  
Fax: 208.686.8600  
E-mail: imayes@uidaho.edu

**Cheryl Lockard,** 4-H Program Coordinator  
University of Idaho Extension, Coeur d’Alene Reservation  
PO Box 29  
402 Anne Antelope Drive, Suite 8  
Plummer, ID 83851  
Phone: 208.686.1716  
Fax: 208.686.8600  
E-mail: clockard@uidaho.edu

38-13/imayes-garden.pub  
12/13