All Gardens Great & Small

by York Co. Horticultural Agent *Tom Becker*

Editor's Note: This week marks the first installment of a gardening column written by Thomas Becker, York horticultural agent for Penn State Cooperative Extension.

Becker has extensive knowlege on all types of gardening (ornamental, fruit, vegetables, and children's). He assists commercial producers and individual consumers with horticultural needs. The first five columns will be a series on World War II Victory Gardens and how that era of gardening applies to today.

We are all "soldiers of the soil," who "plant for freedom" and "hoe for liberty" because we love to "plant vegetables for victory."

These catchy phrases contributed to the war effort by encouraging more planting of gardens and harvesting your own produce. Locally grown farm market vegetable freed precious resources for the war machine. It may be hard to believe that our own private peaceful gardens can be used in warfare; but such is the case. A World War 1 poster filled with patriotic rhetoric declared that "beans and beets' are no less important than "bullets and battleships.'

During World War 11 war, kapok, used to fill life vests, was in short supply. As a replacement, common milkweed (Asclepias syriaca), a common and persistent perennial weed contained seed pods with a greyish, silky, seed fiber. This seed 'floss' was sufficiently waterproof and buoyant and was readily available throughout Pennsylvania's roadsides, open fields and pastures. But, large quantities of pods were needed.

The floss in two bags of milkweed pods filled a life jacket. Young, rural school children were avid collectors of milkweed pods. Students competed with each other to find the best fields containing the most milkweed. School-wide collections gathered truckloads of milkweed pods for the war effort. Bags of dried milkweed pods were stored in factory warehouses or hung up to dry in burlap bags.

Planting Tips 1943

Choose "Color" Vegetables: Victory gardeners were strongly encouraged to choose vegetables based on (1) those with the greatest nutritional value of vitamins and minerals and (2) how easy they were to grow. "Stick to easy to grow vegetables" was a common theme in every gardening bulletin of the time.

Vegetables everyone grew were:

*bush beans, *pole beans, *wax beans, *early beans, *late beets, *broccoli, brussel sprouts, *early cabbage, *mid-season cabbage, *late cabbage, red cabbage, savoy *cabbage, carrots, cauliflower, chineses cabbage, cucumber, eggplant, endive, *kale, *kohrabi, *lettuce, new zealand spinach, *onions, parsley, parsnips, pumpkin, early peas, late peas, *peppers, radish, rhubarb (pie plant), *summer squash, winter squash, *spinach, *swiss chard, *tomatoes and *turnips.

*recommended for small victory gardens.

In addition, bulletins in the early 1940's suggested 'gardeners should choose vegetables that (1) satisfy your own taste. (2) that do well in your locality and (3) that fit in the size of the garden you design."

'Wild' License Plates Help Fund Penn State's Research

UNIVERSITY PARK (Center Co.)—When a Pennsylvania driver motors by and the distinctive image of a saw-whet owl and the phrase "Conserve Wild Resources" decorates the car's license plate, motorists can also get a glimpse of how to support research in Penn State's College of Agricultural Sciences.

To date, some 180,000 wildlife plates have been sold, providing more than $2.2 million to the Wildlife Resources Conservation Fund, which finances research and education related to Pennsylvania's native plants and non-game animals. The conservation fund is supported directly through sale of the license plates, a voluntary checkoff on Pennsylvania income tax forms and donations.

Over the past two years, Penn State scientists have received money from the conservation fund for such projects as the reintroduction of the fisher into Pennsylvania forests, a study of the distribution of mayflies as an indicator of water quality, research on the conservation of the state's butterflies and skippers, and many others.

According to Robert Brooks, associate professor of wildlife ecology in Penn State's School of Forest Resources, funding from the program allows scientists to see how insects, plants and less well-known animal species flourish in the state's varied environments.

Brooks, who has received funds to reintroduce the river otter and the fisher, a relative of the weasel, into Pennsylvania habitats, says the program is very popular because the public knows how the donations are used. "I have a 'Conserve Wild Resources' tag on my car and I always pass out an application for the plate when people ask me how to get one," he says.

Gregory Hoover, senior extension associate in entomology, is using conservation fund donations to study the distribution of mayflies across Pennsylvania. Mayflies, insects that live in rivers, creeks and lakes, can be useful indicators of water quality.

"We need to know what species exist in our aquatic environments so that we know how to conserve them for the future," Hoover explains. "Insects comprise three-quarters of all animals on Earth, but there hasn't been sufficient funding to study them as a part of the wildlife system. The Wildlife Resources Conservation Fund gives us a chance to see a bigger picture of our environment and helps us assess the quality of all our lives."

Another insect-based study focuses on developing methods to count populations of butterflies and skippers across the state. Richard Yahner, professor of wildlife conservation, sees the project as a critical link in understanding how insects—and butterflies and skippers in particular—fit into the food chain.

"Many people in the wildlife profession are becoming more concerned with studying how insects affect habitats," Yahner says, "The agencies that look at insects concentrate on them as pests. Less than 5 percent of our insects are pests, so clearly it's important to understand how the most abundant group of wildlife interacts." Other wildlife fund-supported projects conducted by Yahner and his students over the past three years have included studies on the rare northern goshawk and the threatened Allegheny woodrat.

Robert Carline, adjunct professor in the School of Forest Resources and William Sharpe, professor of the forest hydrology, have received grants from the conservation fund to study whether non-game fish species have declined in streams that are vulnerable to acidification.

"Similar projects on the loss of species have been done for game fish species," Carline says. "This kind of work with nongame species has not been done elsewhere because most of the funding agencies concentrate on game species."

"The Conservation Fund has opened up a wider range of opportunities to study small pieces of a much larger puzzle," says Charles Schaadt, assistant professor of wildlife technology at Penn State DuBois Campus. Schaadt and Christopher Haney, assistant professor of wildlife technology, have just finished a population study of bird species in Pennsylvania's old-growth forest. Schaadt is currently working on a similar project centering on small mammal species in old-growth areas. Both studies are funded by the conservation agency.

(Turn to Page B5)

Nutritional Value

Leafy vegetables, swiss chard, kale and turnip greens were considered very important for their contribution of vitamin A, vitamin C, riboflavin, calcium and iron. Gardeners were told to plant a "color" garden with lots of green and leafy vegetables, yellow carrots and onions and topped off with tomato red trimmings.

While green beans and tomatoes were recommended because they produced abundantly and were easily grown and canned, others like onions and beets were recommended to make meals interesting because of their flavor and color.

Victory Farm Market Gardens

Victory gardens came in all shapes and sizes. In the early 1940's the consumption of vegetables was rising steadily. In addition, the number of truck "vegetable" patches rose in our area, a term still in use today in York County. Farm gardens were the norm in the county at the time. Representing the largest of the victory gardens, these gardens were a necessity to supplement farm income. Most of the produce was marketed directly off the farm or at farmers markets. For a current list of farm markets in your county, contact your county extension office.