## Why We Grow Flax in the Orange Johnson House Kitchen Garden By Bill McDonald, Worthington Garden Club President



Imagine a vast meadow blanketed in satiny pale cerulean flowers wafting in a breeze toward distant Alpine mountains that soar to a cloudless summer sky. You might imagine yourself in Switzerland or Germany. That's where flax, Linum usitatissimum, in the family Linaceae, first came to be cultivated in Europe, about five thousand years ago. It had slowly made its way there from the Fertile Crescent, where humans first domesticated the plant, originated in the wild sometime during the Upper Paleolithic period, about 30,000 years ago. Spun, dyed, and knotted wild flax fibers dating to that time have been found in the Dzudzuana Cave in present-day Republic of Georgia.

Flax was cultivated extensively in ancient Egypt, where temple walls had paintings of flowering flax, and mummies were embalmed using linen. Egyptian priests wore only linen, as flax symbolized purity.

In the Middle Ages, Flanders became the major center of the European linen industry. Colonists introduced flax to North America, where it flourished. By the early 20th century, cheap cotton and rising farm wages caused production of flax to decline. Despite the easy availability of inexpensive synthetic fibers, flax is still grown for the production of linen, primarily in Canada and France.

Flax grown for fiber production is harvested after about 100 days, or a month after the plants flower, and two weeks after the seed capsules form.

Inside the Orange Johnson house the Historical Society exhibits two different types of spinning wheels, one for wool and one for flax. The linen tablecloth on exhibit in the lower level was made by Achsa Maynard Johnson, and she is said to have grown and processed the flax, spun the thread, and woven the linen. Of course, she wouldn't have grown it in the kitchen garden, and would have grown a lot more than we have space for, but the rows of flax we plant serve as a connection to the spinning wheel. The will flower in mid-July to September. Stop by the garden and take a look.



## Speaking of Linen....



A visit to the Orange Johnson house will help to understand the processing of flax fiber into linen. From retting (rotting) to breaking in the flax break, and then combing through the hetchels (hatchels, hackles; pictured left), the resulting fine fiber is gathered to be spun from the dressed spinning wheel that can be viewed in the upper hall. Flax fiber when woven into linen is a strong, durable and soft fabric that is the popular choice for luxury and everyday clothing. Linen resists mildew and bacteria, is cooling to the body and, since its

processing does not require excess chemicals, an ecologically sound fabric. Paper, linseed oil, flax seeds and chipboard are also flax products.

As a mark of her domestic accomplishment, Achsa Maynard Johnson grew, retted (either laid the harvested stems on the field to dry for several weeks or more quickly submerged them with rocks in a stream or pond), then extracted seeds before using the flax break (pictured right) to remove the chaff from the cellulose fiber, "combed" the flax through iron hackles, and then prepared it for spinning. Over 30 strands of tow are yielded from each plant stem. Flax spinning was harder work than wool, which was softer in the hand.



Words that we use from these processes include "don't get your hackles up" (don't get angry), "spinster" (the widow or elderly person who takes up the spinning, which seemed endless) and even "lingerie" and "lining" (referring to the softness of undergarments close to the skin).







Pictured left to right: Flax Wheel, Tablecloth made by Achsa Johnson and portrait of Achsa Maynard Johnson, all on display at the Orange Johnson House.