

## The Mystery of Wild Seeds and Garden Seeds

Remember the mystery seeds at the beginning of the unit?

Examine the picture of the marshelder seeds. Note some of the seeds are a different size. Some of the seeds are wild and some were planted and cared for by people. Can you guess which were wild and which people planted?

How do archaeologists know if the seed is from a wild plant or from a plant grown in a garden? Marshelder was a wild plant. People gathered its seeds for food thousands of years ago. Archaeologists noticed a change in the marshelder seeds in sites dating from about 2,500 years ago (500 BCE). The seeds in the top row are from the wild marshelder. The seeds on the bottom are from marshelder planted by humans. When humans planted, cared for, and harvested marshelder seeds, it caused the **genetics** of the plant to change. Genetics are the biochemical basis of heredity and variation of organisms. One change is that seeds became bigger. Also, the seeds on a single plant ripened at the same time. This meant a more productive harvest for less effort. When a wild seed is changed because humans plant and care for it, scientists say that the new seed is **domesticated**. Think how remarkable it is that a seed can change simply because humans planted and cared for it.

