What is a pulse? In this case the term doesn’t refer to the heartbeat in your wrist. From the Latin word puls, meaning a thick soup, pulses in agriculture are a type of grain crop whose seeds are consumed by people as a vital source of plant-based protein, fiber, minerals, and nutrients.

Pulse crops are members of the nitrogen-fixing Leguminosae family of plants, and those commonly grown in North America include chickpea, lentil, dry bean, dry pea, cowpea, and others. Because pulse crops are grain crops, alfalfa, clovers, and other leguminous forage crops are not classified as pulses. Similarly, soybean and peanut aren’t considered pulse crops because they’re mainly produced for edible oil or used in processed food.

In the Southern and Central Great Plains, the common pulse crop is “dry bean” (Phaseolus) plants in this genus enjoy a long history of cultivation in the region. In fact, Native Americans used ceramic pots to cook beans during Pre-Columbian times in the Great Plains. Edible beans are grown to maturity and then harvested for their dry seeds. Common examples include black, great northern, and kidney bean.

So critical are pulses to health, nutrition, and food security around the globe that the Food and Agriculture Organization of the United Nations declared “International Year of Pulses.” To raise awareness of these crops and the role they play in North American agriculture, Crops & Soils magazine will be highlighting different pulse crops and their uses throughout 2016. Also, the Crop Science Society of America has a website where you can learn more at www.crops.org/iyp.

Pulses in the Plains

For centuries before western settlement, a Native American culture known as the Anasazi thrived in the Four Corners region of the United States, where Utah, Arizona, New Mexico, and Colorado meet. These ancestral Puebloans built spectacular cities, including Chaco Canyon and Mesa Verde. They also farmed, cultivating corn, squash—and pinto bean.

Today, this ancient agricultural tradition lives on:

• Nearly all of New Mexico’s 10,500 ac of pinto bean is grown by the Navajo Agricultural Products Industry (NAPI), a Navajo-owned agribusiness that markets the beans under the Navajo Pride brand.

By Mark Brick, Professor of Plant Breeding and Genetics, Colorado State University, and Madeline Fisher, Features Editor for ASA, CSSA, and SSSA