

## THE STORY OF THE APPLE

Picture Alexander the Great's sailors, c. 323 B.C., training for naval combat by hurling apples at each other, ship to ship. Or "Norfolk Beefin," an 18<sup>th</sup> century apple with beautiful red skin, hard enough to be fired from a cannon.

Barrie E. Juniper and David J. Mabberley in *The Story of the Apple* (219pp., Timber Press, 2006) relate how the domestic apple, an alien from inner Asia, became beloved everywhere, both as foodstuff and symbol.

Apples store and transport well; dried, or as cyder (pure juice) they lose little food value. Containing vitamin C, they early became an anti-scorbutic for scurvy-prone sailors on extended voyages. They contain B12, especially important during winters when other sources are scarce; their flavonoids combat diseases caused by free radicals. Their diluted juice (cider) provided a safe alternative to contaminated water; fermented, cyder substituted nicely for expensive whiskey or wine.

50 million years ago the ancestors of *Malus pumila*, the domestic apple, spread to western China, and particularly to the Tian Shan, the apples' center of distribution and most recent evolution.

The Tian Shan (Heavenly Mountains), in central Asia, is a series of 20 parallel ridges and valleys, with forest-clad slopes surrounded by deserts and, anciently, on the north by glaciers. With plenty of snowmelt water and soils constantly refreshed by active geologic faults, it became a perfect, isolated, protected nursery for the development of the apple.

Apple seeds rarely come true – most seedlings bear bitter fruit (“spitters”) suitable only for cider. But occasionally a seed will produce large, sweet, gorgeous apples to match any supermarket display. And over many centuries, in the ideal, protected nursery of the Tian Shan, thousands of such apples appeared.

With the beginnings of agriculture, 10,000 years ago, and the opening of the Silk Road from China to Europe, travelers and their horses, passing through the Tian Shan, carried apples east and west. It took 6,000 years for apples to reach western Europe, and 300 for them to occupy the rest of the temperate world, through colonization.

People grew and reproduced thousands of cultivars over hundreds of years in Europe, Asia, North America and, more recently, the southern hemisphere. There are still probably 20,000 named cultivars worldwide, most kept in national archives as genetic stock for breeding disease-resistant fruit. Now large scale plantings comprise fewer than a dozen cultivars – “an incestuous and unsustainable situation.”

In 2003 the average American ate 16 pounds of apples yearly. In 2004 the U.S. grew 10.4 billion pounds; now China is the world’s biggest exporter. As of 2006, Golden and Red Delicious were probably the most widely grown anywhere, with Granny Smith a close second. That’s probably changed now, as varieties such as Gala, Fuji and Braeburn have replaced them. Currently, thanks to threats to honeybees, there’s a push to develop a seedless apple, thus making bees superfluous.

Unlike almost any other food, the apple has everywhere entered into names of villages, residences, poetry and

prose, visual arts, language, music, mythology and philosophy. Early apple names include “avall” or “aval” – hence Avalon, the British name for the island center of civilization. Also in Britain, Appleby, Appleton and Appleford, and a “hoary” apple tree whose fruit fell among the bleached bones at the Battle of Hastings (1066).

Muhammad inhales eternal life through the scent of an angel-delivered apple. There’s Eve, William Tell, Newton, Johnny Appleseed. New York City became “The Big Apple,” thanks to Mlle. Eve’s early 19<sup>th</sup> century bordello and its irresistible “apples.”

Unlike most crops increasingly controlled by agribusiness, the authors contend that the apple remains subversive. Wild cultivars continue to sprout in huge numbers, and occasionally throw up a superb specimen, which can then be spread worldwide.