

Great Moments in Apple History

by Mitch Lynd

The Beginning—From the very beginning the ancients were truly enamoured with fruit. Apart from milk and honey, fruit is nature's only pleasure laden natural food. From the beginning apples have been associated with love, beauty, luck, health, comfort, pleasure, wisdom, temptation, sensuality, sexuality, virility and fertility. Stories and traditions about man's origins connect him to a garden of paradise filled with fruit trees. The stories are essentially the same whether it be the Semitic Adam, the Teutonic Iduna, the Greek Hesperides, or the Celtic Avalon, man's idea of paradise centers on an abundance of cultivated fruit, its sensual irresistibility and the consequential calamity of its seduction.

In Greek mythology, Gaia, or Mother Earth, presented a tree with golden apples to Zeus and his bride Hera on their wedding day. Guarded by Ladon, a serpent who never slept, the apple tree was in the garden of the Hesperides, daughters of the Evening Star. These golden apples became involved with many tales of love, bribery and temptation ranging from the abduction of Helen of Troy to the defeat and marriage of Atlanta. The sexual and romantic connotations of the apple were powerful reasons why apples came as dessert at the end of the meal. They not only tasted heavenly and were good for digestion but were regarded as a cunning transitional aphrodisiac for the pleasures that followed. Is it any wonder that apples became the most sought after fruit on earth? They have taken their rightful place in the pleasure gardens of the wealthy throughout the world in spite of the almost instinctive knowledge that eating them may lead one to a life of chaos and destruction.

8,000 B.C.—Nomadic hunter/gatherer societies invent agriculture and begin to "settle" in places throughout the "fertile crescent" from the Nile through the Tigris and Euphrates, the Indus, and Yellow River Valleys. As both trade and military expeditions begin among these earliest civilizations, dessert apples quickly spread from the forests of their origin in the Tien Shan mountains of eastern Kazakstan throughout the "civilized" world. Each settlement seeks to embellish their "paradise" or pleasure grounds with the most tempting apples of the forests. Previously isolated gene pools from some of the 25 distinctly different species of apples found throughout the world are now brought in contact with each other and gene transfer among apple species occurs. Agriculturalists are charmed. Naturalists are alarmed.

6,500 B.C.—Remains of apples are found among excavations at Jericho in the Jordan Valley and dated to this time period.

<http://www.hort.purdue.edu/newcrop/maia/history.html>

5,000 B.C.—Feng Li, a Chinese diplomat, gives up his position when he becomes consumed by grafting peaches, almonds, persimmons, pears and apples as a commercial venture according to "The Precious Book of Enrichment", part I, chapt. 4. Agriculturalists are charmed. Naturalists are alarmed.

2500 B.C.—Dried apple slices are found on saucers in the tomb of Queen Pu-Abi at Ur near Basara, in Southern Iran, linking royalty to the irresistible seduction of apples.

1500 B.C.—A tablet found in northern Mesopotamia records the sale of an apple orchard by Tupkitilla, an Assyrian from Nuzi, for the significant sum of 3 prized breeder sheep. Hittite Law Codes specify a three shekel penalty for anyone allowing a fire to destroy an apple orchard.

800 B.C.—Homer's *Odyssey* recounts the memory of his fruit orchard to his aging father:

"12 pear trees bowing with their pendant load,
and ten, that red with blushing apples glow'd" . . .

and later tells about how King Tantalus was "tantalized" by the unreachable "fruit over his head: pears, pomegranates, sweet figs, apples and juicy olives".

401 B.C.—Greek historian and essayist, Xenophon is so inspired by walled fruit gardens throughout the Persian empire that he establishes one on his own estate in Greece. He then proceeds to coin a new Greek word from the Persian *pairidaeza*, or walled garden, later becoming the Latin *paradisus*, and finally the English *paradise*.

323 B.C.—Theophrastos describes 6 varieties of apples and discusses why budding, grafting, and general tree care are required for optimum production and says seeds almost always produce trees of inferior quality fruit. Agriculturalists are charmed, naturalists are alarmed.

200 B.C.—Latin emerges from a localized dialect in Central Italy to a full and precise language still used in biology, law, medicine, and religion. The Latin "Fruor" meaning "I delight in" is the source of our word "fruit".

100 B.C.—Roman poet Horace notes that Italy has nearly become one big fruit orchard and the perfect meal begins with eggs and ends with apples. Apples moved west with the rise of the Roman empire as the Romans adopted the apples and orchard skills of the Greeks and Persians before them. They proceeded to carry apples to the far reaches of the Roman Empire including continental Europe and the British Isles where previously only crab apples were known. They even created a deity of the fruit trees, the goddess Pomona. Like the Persians and the Greeks, the Romans and many cultures since have responded to the basic human longing for a time and place where men and women are free from the battle with nature for food and shelter. This place is normally symbolized by a garden of paradise and pleasure complete with fruit laden trees featuring apples.

50 B.C.—Cicero, author, statesman, and philosopher urges his Roman countrymen to save their apple seeds from dessert to develop new cultivars. Agricultuaralists and naturalists concur.

50 A.D.—J.M. Columella, a Spaniard living in Rome, an early fruit tester and stickler for quality noted that each fruit seedling was a new and unique cultivar "none to be kept for a long time unless approved by experiment", an otherwise post-Linnean conclusion. To illustrate his point he adapted a verse from Virgil:

It serves no end their* numbers to describe,
The man that's fond of this laborious task,
With equal ease, may learn how many sands,
By western winds are tossed in Libyan plains.

(*i.e. seedling cultivars)

79 A.D.—Pliny the Elder in his Natural History describes 20 varieties of apples.

<http://www.hort.purdue.edu/newcrop/maia/history.html>

200 A.D.—Famous Greek physicians living in Rome, Galen and later Hippocrates, recommend sweet apples with meals as aids to digestion and sour apples only for fainting and constipation.

400 A.D.—Saint Jerome, founder of Monasticism, tells his monks to spend more time grafting and budding fruit trees "to escape sloth and the devil".

650 A.D.—The Koran, codified by Caliph Utman hails fruit as a sublime gift of God.

900 A.D.—A sacred Shiite drama is written by a secret society of Moslem purists featuring the death of Mohammed in which he inhales eternal life by inhaling the scent of an apple an angel had brought him. Curiously, many centuries earlier, Aristoteles was said to have kept death away by holding an apple and inhaling its life sustaining fragrance. Finally and consciously he drops the apple thus releasing his soul.

1100 A.D.—The Medical School of Salerno teaches the therapeutic value of apples with regard to disturbances of the bowels, lungs and nervous systems.

1240 A.D.—Albertus Magnus of Cologne, bishop, naturalist, and influential philosopher, agonizes in his *De Vegetabilibus* over whether a fruit tree has a soul. Albertus' then novel philosophy is that the only way to advance knowledge of nature is by searching for nature's hidden principles rather than by relying on the writings of others, however venerable. Discarding the scholastic concept of fruit as a ready-made product of creation, Albertus held that cultivars developed from wild forms, centuries before Darwin draws similar conclusions about the origin of species.

1470 A.D.—The *Fall of Man*, a painting by the popular and highly respected Hugo Van Der Goes, in clear detail of both leaves and fruit, depicts an apple tree in the biblical Garden of Eden complete with Adam and Eve and the Devil. Thereafter artists everywhere choose apples for the Garden of Eden, even though the apples were no doubt borrowed from a similar creation story in Greek mythology, causing apple demand among illiterate Christians to plummet. Among learned Christians, e.g. in the monasteries and royal courts, apples continued to flourish.

1618 A.D.—William Lawson of Yorkshire, writes *A New Orchard and Garden*, the first book in the English language about the practical aspects of apple growing. He is more often quoted on his sensual

<http://www.hort.purdue.edu/newcrop/maia/history.html>

observations. "All delight in orchards". "For whereas every other pleasure fills some one of our senses, and that only with delight, this makes all senses swim in pleasure". "What can your eyes desire to see, your ears to hear, your mouth to taste, your nose to smell that is not to be had in an orchard, with abundance of variety." Two mottos appear on the title page; "Skill and paines bring fruitful gaines" and "No man is an island". Lawson who believed orcharding offered the best of business and pleasure had a profound influence on the Lynd family of Yorkshire.

1665 A.D.—Sir Isaac Newton watches an apple fall to the ground and, wondering why it fell in a straight line, is inspired to discover the laws of gravitation and motion.

1751 A.D.—Carl Von Linne, founder of organized Botany, revealed his contempt for horticulture when he said "All our fruit trees are a result of Man's interference and, therefore, unworthy of the attention of even the lowliest botanist". Agriculturalists groaned. Naturalists applauded.

1790 A.D.—Thomas Andrew Knight of England begins the first controlled apple hybridization program for apple improvement. Agriculturalists are charmed and naturalists are alarmed.

1904 A.D.—"An apple a day keeps the doctor away", proclaimed J.T. Stinson in an address to the St. Louis Exposition.

1929 A.D.—Edward Bunyard, author of "The Anatomy of Dessert", comments on apples and the 6th sense "the crunch is the thing, a certain joy in crashing through living tissue, a memory of Neanderthal days".

1945 A.D.—An apple breeding program is initiated jointly at Purdue and the University of Illinois using F2-26829-2-2 the largest and highest quality apple known at the time to have resistance to the big three diseases of apples, fireblight, scab and powdery mildew. It came from a brilliant, out of the box, cross made by Dr. C. S. Crandall at the Univ. of Ill. earlier in the 1900s who crossed Rome with Malus floribunda 821, a pea sized crab apple that was highly resistant to all the major diseases of apple.

<http://www.hort.purdue.edu/newcrop/maia/history.html>

1988 A.D.—The great Alar controversy arises while toxicology experts on both sides argue. Apple growers are caught in the middle as apple demand falls to zero and the media rushes to report one sensationalized story after another about harmless, nearly non-existent chemical residues on apples. Perception overrides reality and the U.S. apple industry goes into a steep economic decline. It is the year of peak apple production for Lynd Fruit Farm Inc. at 240,000 bushels. The consequential losses were enormous.

1989 A.D.—Researchers at Cornell University used a "gene gun" to successfully transfer an anti-bacterial gene from a *Cecropia* moth to a fireblight susceptible apple tree. This gene transfer from an animal to a plant enabled the tree to develop its own fireblight resistance and trees made from buds or graft wood from this tree also had blight resistance. Bio-tech as demonstrated could save the apple industry and consumers millions of dollars. Agriculturalists are charmed. Naturalists are alarmed.

1993 A.D.—The world's first large scale commercial planting of naturally disease resistant apples is planted at Lynd Fruit Farm, on Morse Rd., Pataskala, Ohio. The trees then known as HER4T16 are later elevated to "Co-op 38" and finally named Goldrush. It is the first large scale application of the breeding program begun early in this century at the University of Ill. Agriculturalists and naturalists applaud.

1995 A.D.—Mitch Lynd named Apple Grower of the Year by the American Fruit Grower Magazine and the U.S. Apple Association from over 9,000 apple growers in the U.S and Canada.

1998 A.D.—Mitch Lynd and co-founder Ed Fackler start the Mid West Apple Improvement Association, a group dedicated to breeding disease resistant late bloomers to naturally escape fire blight, scab, powdery mildew, cedar apple rust and late spring freezes thus reducing the use of fungicides, antibiotics, and orchard heating. Agriculturalists and naturalists applaud and chemical companies cringe. Land grant colleges of agriculture are in a bind because increasingly their funding comes from pesticide manufacturers instead of the people through taxation and charitable giving.

2000 A.D.—Researchers at the University of California discover powerful new anti-oxidants in apples.