

Historic Apple Identification - the old fashioned way

Background

[Montezuma Orchard Restoration Project](#) (MORP) is currently working on methodology to help guide fruit enthusiasts through the steps of describing an apple to answer “what apple is this”. There are few aspects of apple culture as bedeviling as apple identification. While named varieties of apple trees are clones, and thus, genetically identical to each other, within that variety, the apple itself can attain a wide range of morphology depending upon how and where it is grown. That means two apples could look significantly different but still be the same; or, two apples that look alike are actually different.

As MORP Orchardists we have learned from the wise-words of old-timers that the only way to truly get to know an apple is to make a lot of tracks around the tree. That way one becomes familiar with not just the apple itself, but with specific characteristics about the tree such as bark, leaves, and shape. While you are walking around the tree you may even get to visit with someone from whom you can learn. The gold standard in apple identification is to find a person that grew up or grew old with the trees, and ask them to “name that apple”.

Repeatedly tasting the fruit, season after season, so that the complexities and subtleties of the flavor, texture, and appearance can be tattooed upon your senses is necessary to build a comparative base of understanding. It is also of great importance to know what varieties were historically grown in your area, as found on old state and county fair lists, and horticultural reports from state journals and newspapers. Equally, the age of the tree or trees is an important clue, often determined through orchard assessment, interviewing knowledgeable people, and reviewing property abstracts.

There were some 17,000 individual varieties of apples in America during the 1800s compared to 6,000 today. To this point MORP has documented about 500 individual varieties of apples actually grown historically in Colorado, thus somewhat narrowing the likely choices in our area orchards. While this is a more manageable number to sift through, it leaves enough varieties to encourage confusion in identification; it's compounded by the fact that so much of the knowledge of apple identification has been forgotten over the last century. Most people today simply have no idea what old tree is growing in their backyard, and the number of experts to turn to are rare and scattered far and wide. As the number of apple varieties decreased the knowledge of these varieties, and the skill needed to identify them, disappeared with the trees.

Several attempts have been made to develop a botanical dichotomous key for separating this from that in the apple world, but given how many characteristics an apple possesses, and the changing nature of living things, these keys can get unruly still leaving you with scores of possible matches once you reach the end of your search. With few exceptions - such as [Orange Pippin](#), an online listing of over 600 apples -

detailing scores of attributes with hundreds of possible identifying features - efforts to develop a key for apples are as old as the ancient trees themselves.

Apples can be grouped into simpler terms: their uses - dessert, culinary, cider, their season of ripening - summer, fall, winter, or their flavor profile - acidic, sweet, bitter, sharp, etc. Sometimes the use matters more than the name; one can still know their old trees by knowing what the apple is good for. The apples can be used, and the trees grafted, while we try to learn their historical name.

Another great tool to try to identify an old apple is the [USDA pomological watercolor collection](#), which was recently digitized and made available online. These beautiful paintings of fruit from the 1800s & 1900s are worth more than a thousand words of flowery description.

Historically, three of the most important works on the subject are: Robert Hogg's, *The Fruit Manual*; S. A. Beach's, *Apples of New York*, and Edward Bunyard's, *Hardy Fruits*. All have small but densely packed sections in their books concerning the identification of apples. Beach lists about twenty five attributes for the tree, leaves, bark and fruit. Bunyard breaks apples into seven different groups. Hogg uses four specific structural components. In combining these three works MORP aims to make a more manageable guide for apple identification focused on Old Colorado Apples. Ideally, we will be able to identify historic Colorado apples (apples that were historically grown in our state, a few of which are of Colorado origin), group them by description, and thereby know them when we see them.

Given the limited information on such varieties as Ned, Basket, St. Vrain, Mountain Sweet, Colorado Sunset, and Colorado Red Streak, true identities may never be known on some specimens. Still, a comprehensible, methodical approach will help, when with apple in hand you ask, "What apple is this?"

Let us first become familiar with the works of these early pomologists.

[Hogg:](#)

The 1884 Fifth Edition of Hogg's work contained in his words "the new classification of the Apple upon which I have for some years been engaged". Hogg based this classification upon four structural characters of the apple: the Stamens, the Tube, the Carpels, and the Sepals. By knowing the position of the stamens, the shape of the calyx tube and carpels, and the forms of the sepals one can learn one apple from another. For example, if an apple has marginal stamens, a conical tube, axile round cells, and an erect convergent calyx in a late red apple historic to Colorado, then we might surmise that it is a Melon apple. The only possible problem with this system is what the heck does all that mean?

Bunyard:

Bunyard, published in London in 1920, breaks apples down into these seven groups based on specific attributes, or lack thereof; we have chosen not to encumber each group with Bunyard's names because it is more important to know the characteristics than to know that group one is Lord Darby, group two is Lanes, etc.

1. Smooth. Green. Sour. May have blush but not stripes. Rhode Island Greening is an example of this group.
2. Smooth. Striped. Sour. A few here are a little sweet. Bramley's, Twenty Ounce, and Tom Putt are in this group.
3. Smooth, Striped. Sweet. Nearly all of sufficient sweetness to be classed as desert. All have the stripes distinctly marked and not obscured by blush. Examples are Duchess of Oldenburg, Wagner, Wealthy, and again Twenty Ounce, suggesting the difficulty of fitting any apple into a single basket or bracket.
4. "Golden Nobel" group - these apples have markedly golden skin, flushed but not striped. The beautiful old Winter Banana apples are our area's finest example.
5. Dark brown, red flush, absence of russet, rarely striped. Many of our historic Colorado varieties are in this group; Northern Spy, Delicious, Fameuse, Bietigheimer.
6. Reinettes - Red and Russet. Very large proportion of best flavored fruits, characteristic is a mixture of red and russet. No acid cooking varieties. The Colorado Orange apple would join Autumn Pearmain, Ribston Pippin, and Golden Reinette here.
7. Russet without red. Golden Russet and Ashmead's Kernel were historically grown in Colorado.

Each of these groups has its own identification page. Across the top of the page were the forms of the apple: flattened or oblate, round, oblong, oval or conical. Going down from the top of the page, on the left hand margin, is the month of ripening, summer through winter. By combining the characteristics of the apple in your hand to the group description, and knowing the month, and understanding the basic forms of the apple, one should be able to match a specimen to a probable grouping. If then you know what was historic to your district, with good enough descriptions to place these varieties in to one of Bunyard's groups, you should be able to get a match and identify your apple, or at least narrow the options.

Remember, in using Bunyard's groups we are assuming that the discriminating factors he used, and his placement of apples into these groups, are correct. There is ample room for collaborating historic documentation, DNA testing, and, comparative digital analysis, including networking with other fruit enthusiasts.

Beach:

If you ever want to learn about apples, Beach, and his iconic *Apples of New York*, is a foundational piece of knowledge. You cannot go around it, it must be passed through. If we are to gain continuity of our language, to share for comparison and collaboration our

knowledge and understanding of this topic, of this heritage, Beach is a rock to be built upon.

When taking a look at Beach's description of the Baldwin, and the identifying factors that he used to make an apple an apple, there are about these twenty five characteristics that are available to us in differentiating apple varieties. They include tree form, vigor, bark and leaf patterns, fruit size, form, uniformity, cavity, stem, basin, calyx, skin, dots, calyx tubes, stamens, core lines, etc, etc... Each of these is a rabbit hole. Go there if you will, but know that return is not certain. Other botanists have weighed each of these factors differently. We are creating guides, not seeking absolutes.

Here is where Beach meets Bunyard, "Certain characteristics of fruit are more consistent than others.... To my mind, considering all classes of fruit, there is no one characteristic so fixed as the form.... It is true of the immature as well as the fully developed specimens." (Van Dieman, as quoted by Beach).

Remember that Bunyard classed apples consistently by season and form, all other variables contained were separated by distinguishing features into groupings, and then sorted by their season and form. Even if Bunyard is off as to his apple classifications, form is form, season, is season.

In Summary

If we can know the month in which an apple is ripe, and then know the shape of that apple from comparison of numerous specimens, we can classify that apple into certain basic groups as taught by Bunyard. Then by careful study we can analyze the identifiers that Hogg and Beach gives us: stamens, tube, carpels, cavity, basin, dots, sepals, stripes, blush, etc., and we might differentiate these apples into their respective varietal groupings. A detailed examination of season and form, combined with distinguishing features, and historical documentation, will enable us to methodically describe and identify an apple.

Though confusion is easy to find, to begin to become an expert, all you need to do is to pick from a tree an apple or score, take a bite or more, slice, look, feel, smell, taste, and repeat. Make your own tracks around trees. Worry about the details later. This is not always easy, but it can be made more simple, and one must take the first step to know "what apple is this".