Sara’s Polka Dot is one of the old Montezuma County apples that will be offered for sale at MORP’s Heritage Apple Tree Sale on June 18. A summer apple of unknown identity and origin, the apple’s current name honors its orchard’s owner and spotted skin. Apple experts are intrigued by this apple and MORP has sent it off for genetic testing (see article p.5). It makes decent cider for an early apple; and especially good fresh off the tree, dried, or as sauce. Tender, juicy, sprightly acidic flesh.

Another variety of interest is the Thunderbolt, AKA Hoover apple. Thunderbolt is a large, beautiful dark-red apple with white speckles and firm, briskly acidic flesh - a favorite of our fruit-growing pioneer Jasper Hall, known affectionately as the Fruit Wizard of Montezuma County. Pick and store this apple after a good frost to enjoy all winter as its flavor only gets better with time.

A few prized specimens of the Colorado Orange Apple will also be available. The Colorado Orange was rediscovered by Montezuma Orchard Restoration Project as a single tree growing in Canon City, Colorado in 2012. An apple of Colorado origin, it was known outside our state in the early 1900’s. Prized for its great eating, hardiness and storage qualities, the Colorado Orange apple nearly became extinct because it was not a popular shiny red apple. Rather it is a firm, crisp, juicy yellow apple with an orange-red blush and a fine subacid flavor. An excellent keeper, great fresh, and most likely makes a fine cider like so many winter apples do. We believe this apple has a promising future in Colorado and beyond.

The tree sale will be held at Addie and Jude’s McElmo Farm. Over 100 trees representing 51 varieties of locally hand-grafted rare and desired heritage varieties will be available, although quantities of many varieties are limited to one. Due to the limited availability of these varieties and the labor involved in grafting and care, trees are priced at $50. The exception is the rare Colorado Orange apple which will sell for $100. All proceeds benefit MORP.

For a complete list of the offered varieties, descriptions, and whether the apple was historically grown in Colorado, please email Addie at addie.morp@gmail.com.
Welcome!

Dear MORP Members and Supporters:

Welcome to the first edition of our print newsletter. We will continue with frequent Facebook posts and e-mails, but there is nothing quite like holding an old-fashioned printed piece of news. Twice a year we will communicate this way, keeping you apprised of how you are helping keep our fruit-growing heritage alive.

MORP has come a long way since founders Addie and Jude Schuenemeyer were first approached by an elderly customer at Glenn’s Garden Center in 2001. She asked if they could get her favorite tree she knew from her childhood, but could no longer find...a Yellow Transparent. As it turned out, the Yellow Transparent, a fairly well-known tree in the heritage fruit world, was not at all common in a nursery. Addie and Jude tracked it down for her from a specialty nursery, and as the years went on, they learned that Transparents and many other heritage apples grow locally. They became inspired to seek them out and learn to graft; thus began MORP.

After years of searching out orchards; researching fruit history; re-discovering varieties and teaching workshops, Addie and Jude could no longer be volunteer fruit explorers while running a business full-time. After convening a Board of Directors in 2014, they closed Let It Grow Nursery in 2015. Since then we have been building an organization and resources to enable MORP to meet its mission.

In many ways we are charting new ground. Although people have been growing apples here since the late 1800s, and John(ny) “Appleseed” Chapman began planting apple nurseries around 1806, MORP is the first organization formed specifically to document historic orchards; preserve rare fruit genetics; teach people to graft, prune, and understand our fruit heritage; and restart a local fruit economy.

Towards that end we are fortunate recipients of four grants to partially fund: 1) a survey of historic orchards; 2) a market analysis for old apples; 2) grafting and propagating 3,000 heirloom apple trees; 3) collecting 300 samples for DNA analysis; 4) working with Montezuma School to Farm to plant orchards in every RE-1 school and develop curricula about apple diversity and growing apples; 5) a Heritage Orchard Owner’s Handbook; and 6) a strategic plan, accounting system, and fruit database.

In January 2016, Addie and Jude Schuenemeyer officially became part-time Orchardists and I a part-time Director. For Addie and Jude it is a dream-come-true to devote themselves to “fruit exploring”. For me, after spending the last twenty years picking these old apples and pressing juice with my family and friends, I am honored to help keep this tradition alive.

As you read about our activities, please also continue to support MORP. While the grants may seem abundant, they fund only certain activities, are temporary, and require a strong showing of community support. To keep MORP strong into the future, we need contributions from people like you. Your mailing label shows the date of your last donation to MORP. If it has been more than 12 months, please renew or give an extra gift with the enclosed envelope or on-line at www.montezumaorchard.org. If you are receiving this newsletter and have not joined MORP (ie no date), please do. As a member, you will continue to receive our newsletter, get discounts on trees and classes, and play a key role in preserving our fruit-growing heritage for the future.

Thank you,
Nina Williams

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MORP operates as a not-for-profit organization under the 501c3 sponsorship of Mancos Valley Resources.

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Montezuma Orchard Restoration Project

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and on Facebook

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Montezuma Blush (see p. 6 for this exciting find)
Early Montezuma County fruit-growing pioneers. We do not know who they are. Please contact us if you do.

Cedar Hill Black, Raspberry apples. The names conjured up images and flavor combinations that made my heart flutter.

It dawned on me that our pioneer predecessors who planted these orchards left us a legacy. And we get to choose whether or not we pick up the baton and carry forward this rich orchard culture. MORP has chosen to pick up the baton and carry forward this rich orchard culture. But we can only do it together as a team, with our whole community on board.

We are at a key moment in our regional history. Many of the old trees are in danger of dying in the next five to ten years. If that happens without them being recorded and grafted into new trees, unique apple varieties could be gone forever. There are few times in life that you can lend a critical hand in carrying your history into the future in such a poignant way. This is one of them.

Whether you write a check to support MORP, purchase trees at our upcoming tree sale, plant new orchards, help restore old ones, join our industrious board, or help with fundraising, there is a place for you to be a part of history in the making. We hope you will join us in a fruit revitalization movement that is historic in nature, limited in time, and innovative to its core.

You are welcome to the table,
Sarah Syverson

In Memory of Bryan Shanks

Last December MORP lost a dear friend with the passing of Bryan Shanks. Bryan was a founding board member whose contributions included designing our apple database, website and GPS mapping system. Bryan always helped at events including an eight-hour applesauce-making extravaganza. We remember his sweet, big smile and generosity to MORP. He was incredibly kind, thoughtful, and appreciative of everyone he worked with. Thank you Bryan, we miss you dearly.

Friendly Fruit Feud?

From the editor of the Mancos Times, September 3, 1897

McElmo Canon peaches, pears, apples and grapes have made their appearance in this market, and those endowed with common honesty and candor must acknowledge that for size and flavor they greatly out-class anything yet brought in from Farmington, but the McElmoites hold their products entirely too high, as compared to those from Farmington.

To prove that McElmo Canon is not the only fruit raising section of this county, we desire the constituency to call at this office and examine a half dozen varieties of apples, plums and crab apples that Wm. Halls has left here to exhibit. His pears are not yet ripe, but by those he has many varieties. He has many varieties. His early apple crop was consumed by his Weber Canon neighbors, but he has quantities of fall and winter apples that cannot be excelled, for size and flavor.
Montezuma County is old orchard country and a “hot spot” for fruit exploring. Last season MORP mapped 63 out of nearly 200 identified historic orchard sites; and although only a third done, placed 2,611 fruit trees (mostly apples)—66 to 125 years old—back on the map. This work entails taking a Global Positioning Unit (GPS) coordinate of each tree, photographs and field notes; and importantly, talking to the owners about the history of the trees. Data is entered into MORP’s fruit database, building knowledge of our heritage fruit resources as we design strategies to preserve them.

The last time this type of work was done here, albeit without GPS, was in the early 1920’s, when then state horticulturist, E.P Sandsten, surveyed every fruit district in Colorado. The 1922 Orchard Survey of the Southwestern District of Colorado documented 67 apple orchards, 49 known apple varieties and 48,630 apple trees in Montezuma County. Jonathan (old fashioned) was the most popular; Rome (old fashioned), Winesap, Gano, Delicious (old fashioned), White Winter Pearmain, Ben Davis and Grimes Golden followed in decreasing abundance.

Sandsten’s survey also foretold the immediate future of southwestern Colorado fruit, “The district has great potential possibilities for commercial fruit growing…and if transportation facilities were available it would become one of our greatest fruit sections in the State”. Southwestern Colorado had no interstate highway and its only rail line, the Rio Grande Southern, was a regional narrow gauge train that struggled through the Great Depression only to cease operations in 1951. By that time the US apple industry was focused on five commodity varieties: Red and Golden Delicious, Rome Beauty, Jonathan, and Winesap. Northcentral Washington, with its access to transcontinental railroads and Pacific Rim ports, had become the Apple Capitol of the World. Today however, there is a different future for old apples, thanks to growing interest in local and heirloom food and the resurgent hard cider industry. The work of our early fruit-growing pioneers holds potential to restart commercial fruit growing.

Varieties that MORP has identified include: Chenango Strawberry, Maiden Blush, Winter Banana, Stayman Winesap, Winesap, Yellow Bellflower, Gano, White Winter Pearmain, Grimes Golden, Yellow Transparent, Early Strawberry, Wolf River, Black Ben Davis, Willow Twig, Thunderbolt, Northwest Greening, Rhode Island Greening, Golden Delicious, Colorado Orange, Cedar Hill Black, Wealthy, MacIntosh (old fashioned), Wagener, Hawkeye Delicious, Double Red Delicious, Standard Delicious, and many Rome and Jonathan types—some of the “old-fashioned” type. Dozens more have been tentatively identified: Liveland Raspberry, Winter Rambo, Summer Rambo, Ben Davis, Northern Spy, Baldwin, Cortland, Early Harvest, Sweet Pear, Ralls, and others…the results from the DNA testing will help us better understand the valuable resources in our heritage orchards.

When we are out mapping the old orchards, one tree and one GPS point at a time, after 100 points and late in the day, we can wonder if mapping each and every tree still growing here is too detail-oriented. Then we think of the work that went into planting the orchards and Sandsten’s survey. We decide yes. We are going to put every one of these trees back on the map!
Apple cultivars are traditionally vegetatively propagated by grafting; many apple cultivars have been sold and exchanged over the centuries. During the American homestead era, apple trees were planted on properties as part of the process of cultivating the land. Cultivars purchased as grafted trees from nurseries often had desirable traits, such as large, higher quality fruit that could be eaten fresh, stored for extended lengths of time, or used for cider production. Trees planted from seeds often did not exhibit desirable traits for fresh consumption, and were instead used primarily for cider. Many historic apple cultivars remain available today as grafted trees in national and private collections. In fact, DNA genetic fingerprinting techniques have been used to develop a database of fingerprints of materials in the USDA collection for use in unknown cultivar identification.

An informal collaboration among the Montezuma Orchard Restoration Project, historic orchards of Wyoming (both through USDA Specialty Crop Research Grants), Yosemite and Redwood National Parks, as well as El Dorado National Forest is underway to identify locally important historic apple cultivars. This effort seeks to use known historic cultivars in the USDA-ARS National Plant Germplasm System Apple Collection—as well as selected varieties in collections at Washington State University and the Temperate Orchard Conservancy (Oregon)—as standards to determine the identities of unknown apples. Leaf tissue from key historic apple trees was sent to the National Laboratory for Genetic Resources Preservation in Fort Collins, Colorado. A graduate student from the University of Wyoming has been extracting DNA from these leaf samples and will be preparing the extracts for fingerprinting analyses. Molecular markers, termed “microsatellites”, will be used to compare the genetic identities of the unknown (or tentatively named) cultivars to those in known collections. We hope to be able to identify many of the grafted materials that were previously unknown. This method of genetic testing will only yield cultivar names for grafted varieties; therefore, historic trees that originated from seedling sources will likely remain unidentified.

Two publications relate to this work. One is a publication by Kanin Routson, Ann Reilley, Adam Henk and Gayle Volk titled “Identification of Historic Apple Trees in the Southwestern United States and Implications for Conservation” (HortScience 2009. 44:589-594) and another was recently published by Gayle Volk and Adam Henk “Historic American Apple Cultivars: Identification and Availability” (J. Amer. Soc. Hort. Sci. 2016. 141:292-301).
Specific apple varieties cannot be planted by seed; they must be vegetatively propagated through a technique called grafting. Apple trees planted from seeds grow into a wild seedling bearing an unpredictable, if any, resemblance to its parent tree.

Thanks to the Colorado Department of Agriculture, a USDA Specialty Crop Block Grant Program, the Gates Family Foundation, and donations from folks like you, MORP grafted over 1,000 apple trees and taught eight grafting workshops this spring.

Over the winter, and with the help of volunteers Ken Amling and Glenn Dunmire, Addie and Jude collected scion from historic trees. Scion is a dormant shoot, preferably first-year growth, cut from the desired apple tree. The scion is spliced onto a specific type of rootstock at what is called a graft union. Cambium—live tissue between the bark and wood of the tree—of the rootstock and scion fuse together at the graft union to form the new tree. This graft union gets banded and covered with wax to callous and heal while the young graft is tucked away in a cool dark place. When the buds begin to swell, the graft is planted to leaf and root out.

The resulting tree bears the fruit of the tree from which the scion came and has the physical characteristics of the rootstock: size, yield, hardiness, adaptability and disease resistance. Most of our area’s historic orchards are planted on standard American seedling rootstock which produces large, stately, free-standing and vigorous trees best planted widely-spaced. Newer dwarfing and semi-dwarfing rootstocks produce smaller trees that bear fruit younger and can be planted closer together.

The scion for these grafts came from years of getting to know people and their orchards, current and historic. In broken rows, or left along a fence line, trees and orchards are the most quintessential of cultural landscapes.

In this scion we hold the people and their trees, generations of ideas and ambitions carried through time in the roots and the branches, soil and sun, stories and dreams. Our hope is that these young trees will form the historic and genetic structure of a new orchard economy, an orchard culture based upon the legendary quality of Montezuma County fruits.

As we finish this season of grafting and embark upon growing out the new trees, our minds are full of the people and places that we are so fortunate to know. Their generosity and belief in what is possible are allowing an orchard revival in our valleys. Though challenges remain, we are mindful of the great benefit that we have received from those who labored before, and assured that our difficulties are opportunities.

You Too Can Be a Fruit Explorer

Last fall, Ron and Lisa rode their Harley down a Montezuma County road. That day they did one inordinate thing out of the ordinary by pulling over to slip down a steep ditch and precariously lean out to reach an apple they later named Montezuma Blush (see photo p.2). A great find and truly an apple worthy of such a good name; large and juicy with sweet, fruity, yellow flesh. Later, they told us something that made us as proud as when we rediscovered the lost Colorado Orange and Cedar Hill Black apples.

Ron and Lisa reminded us that at the 2015 Orchard Social we had explained how apples are named, as every seed creates a different apple. Some of these seedling apples do not get much notice; others are prized, named, grafted, and shared for generations. We told Ron and Lisa that not only does MORP seek lost apples already named, but also values the seedlings that grow in Montezuma County’s remnant orchards and along fence lines. We told them, “you too can find and name an apple if you stop and taste the seedling fruit”. That is exactly what they did that day, giving us a part in the story of their great find.

Yes, every named apple variety began its life as a seedling. The only way an apple variety can be saved is through the method of grafting and sharing the name and story of the apple. In the last hundred years our culture has lost much of this skill and knowledge, and countless varieties have been lost. Yet others are waiting to be found, growing in our landscape; and like the Montezuma Blush, waiting to be noticed and named for the first time.

This past winter Ron took us to the Montezuma Blush and we taught him how to collect scion. He and Lisa brought the scion to one of our grafting workshops and learned the skill to save and share their prized find for present and future generations.

It does not do much long-term good to find a new variety or rediscover a lost one if you do not learn to graft, and then share it. This is a basic ethos of the fruit-exploring community and exactly the methods that MORP follows. To do otherwise—to hoard or restrict the sharing and propagation of an apple—puts it at risk of extinction by limiting its ability to be propagated and distributed.

This summer, as you see seedling apple trees growing along county roads and fence lines, make a note and return as the fruit ripens. If you find the fruit tasty and “worthy” of a name, let us know. We will be happy to teach you the art of grafting and help you too become a fruit explorer.
MORP received cash and in-kind contributions from the following individuals, businesses, and foundations between 2014 and May 2016. Please let us know if you think we are in error.

**Individuals**
- Gary and Ming Adams
- Lisa Allee
- Ken Amling
- Mark and Stephanie Anderson
- Dennis Rieb’s Autoworks
- Lois Bachman
- Richard and MaryLyn Ballantine
- Tom Barney
- John Bealke
- Liz Bohm
- Bob and Robyn Bragg
- Mary Brisson
- Ann and Don Brown
- Aryan and Jackie Brumley
- Joe and Shamai Buckel
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- Janette Harrell
- Sandra Harris
- Keri Hatley
- Carla Hendrickson
- Robby Hennes
- Lisa Henry in memory of Bryan Shanks
- Robert Heyder
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- Monica and Wayne Noland
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- Margriet Schnabel
- Addie and Jude Schuenemeyer
- Jack and Judy Schuenemeyer
- Mary Schultz
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- Daniel Smith
- Margaret Stechman
- Ken and Joyce Stevenson
- Rita Stramel
- Robin and Nancy Strother
- Sarah Syversen
- Dusty and Martha Teal
- David Temple
- Marlene Thorsness
- Robert Touslee
- Linda Towe
- Joanne Trussel
- Curtis Utley, Jefferson County Extension
- Arthur and Carol Van der Harten
- Vic Viera
- Dave and Liz Vlaming
- Jeff Wagner
- Janet Weeth
- Harold and Darla Welty
- Koby Westerhol and Kelly Brumley
- Ev and Sue Whitehead
- Nina Williams
- Wade Wilson
- Indie Wolf
- Janet and Dan Wood
- Diane Wren
- Cynthia Zehm

**Foundations, Businesses and Organizations:**
- Ballantine Family Foundation
- Colorado Dept of Agriculture
- Colorado Preservation, Inc.
- Dunmire Consulting
- Gates Family Foundation
- Home and Range
- Kenney Brothers Foundation
- Mancos Valley Resources
- Montezuma Land Conservancy
- Montezuma School to Farm
- Southwest Management Services
- US Department of Agriculture
- Whole Foods Market
- Woods Canyon Archaeological Consultants

Thank You MORP Members and Supporters!

Robin and Nancy Strother
Sarah Syversen
Dusty and Martha Teal
David Temple
Marlene Thorsness
Robert Touslee
Linda Towe
Joanne Trussel
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Ev and Sue Whitehead
Nina Williams
Wade Wilson
Indie Wolf
Janet and Dan Wood
Diane Wren
Cynthia Zehm

Jude and Addie discussing this tree’s possible identity during an interview this spring with Colorado Public Radio.
Please check the date on your mailing label. It shows, according to our records, the date of your last donation to MORP. Memberships run for 12 months. Please renew today if your last donation was 12 or more months ago, or let us know if our date is incorrect. If there is no date you are receiving this complimentarily; please join MORP today. Thank you for your support!

The USDA Pomological Watercolor Collection is an historic botanical resource that documents new fruit and nut varieties, and specimens introduced by USDA plant explorers between the years 1886 and 1942. Lithographs of the watercolor paintings were created to illustrate USDA bulletins, yearbooks, and other publications distributed to growers and gardeners across America; serving as an important research tool for a variety of users, including horticulturists, historians, artists, and publishers.

Annual Meeting Notice

As per Montezuma Orchard Restoration Project By-Laws, notice is hereby given of the 2016 Annual Meeting. A general membership meeting shall be held once each calendar year for the purpose of reporting to the membership and to elect directors and officers. Please join us for updates and to meet and vote on your Board of Directors. For questions, call Nina at 970-560-1443.

August 9, 2016, 4-6 PM
Cortez Cultural Center
25 N. Market St. Cortez

Pewaukee Apple: Martha A. Shute.
Galloway Bros. 11-25-1906.