Lost Apple Project – October 2025 Monthly Report

October is always our busiest month in the apple identification process. Identifying a cultivar is typically a two-step procedure, beginning with evaluation of the fruit itself. Reference materials are invaluable in this process. Several historic texts, dating from the late 1800s to early 1900s, describe the physical and quality characteristics of the fruits of apple cultivars that were common at the time. Additionally, the USDA commissioned a series of watercolors illustrating these cultivars. The USDA Pomological Watercolor Collection, painted between 1886 and 1942, was created to document fruit and nut varieties, primarily to produce lithographs for USDA bulletins distributed to growers. These watercolors are housed at the USDA Agricultural Library in Beltsville, MD, and are also available online. Apple identification experts use both these written descriptions and watercolor images to make informed assessments of a cultivar's identity based on observable traits.

In parallel with traditional identification methods, modern DNA fingerprinting provides a complementary approach. Leaf samples are collected from trees, and DNA is extracted to determine allelic variants at 48 breeder-friendly markers. These genetic profiles are compared against a database of 3,000 cultivars. If a sample does not match any entry in the database, it is considered 'unique'—either a seedling or a previously unidentified cultivar. When multiple trees with identical genotypes are discovered across different orchards, this provides strong evidence for a lost cultivar rather than a chance seedling. Combining phenotypic evaluation with DNA analysis often yields the most reliable identification results.

This October, we collected fruit from numerous orchards and received shipments from across Washington, Idaho, and Oregon. We estimate that approximately 200 bags of apples—each containing 4–8 specimens from a single tree—will have been sent to our apple identification experts. Leaf samples have also been collected for genotyping through the MyFruitTree lab at Washington State University (Cameron Peace, WSU).

We continue to collaborate with WSU on the Heritage Apples of Whitman County (HAWC) orchard at the Spillman Research Farm Horticulture Center. The HAWC consists of two primary sections:

1. **Known Heritage Varieties** – Approximately 180 apple varieties historically grown in the Palouse region that remain available through nurseries and other sources.
2. **Unknown or Lost Varieties** – About 40 apple varieties considered lost or currently unidentifiable.

Scions from these trees are grafted and cultivated at Spillman to assist with identification. Each cultivar is planted in duplicate on dwarf rootstock. Currently, approximately 70 cultivars are planted in the orchard, with an additional 15 cultivars recently grafted and maintained in pots. The HAWC has capacity for up to 224 cultivars, leaving room for continued expansion as new, old cultivars are identified and propagated.

Palouse Museum

It's very rare not to have visitors on Saturdays. Work continues on various projects of special interest to our volunteers. As far as paying the bills and other usage goes, we still have the Tuesday morning Coffee Club, who are generous with their donations and insist I don't turn the heat up just for them. The museum was used during Haunted Palouse in the evenings and did not require the museum to be closed on Saturdays. In December it will be host two evenings for a "theatrical production" - another great exposure to the museum. I have set rental fees that I am comfortable with.

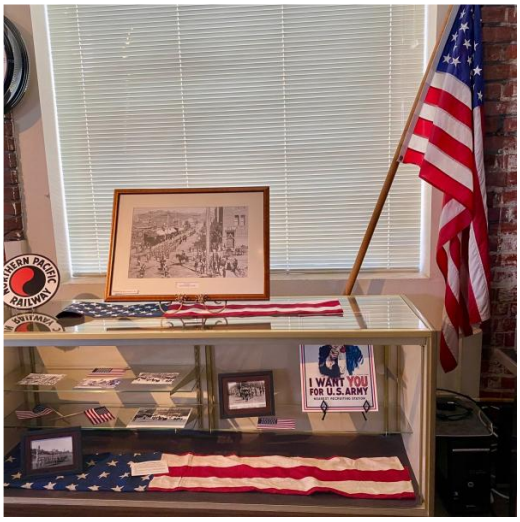
Janet Barstow

Depot Report for November 2025

Avista placed a new power pole at the edge of the entrance to the depot from Kamiaken Street and installed an upgraded transformer on the concrete pad. Electrical Contractors NW will complete all the connections to the basement and make ready for power to come from the new transformer. When it comes time, the electrical meters can be moved from the outside of the building to a stand next to the transformer.

The train cars have been covered with tarps for the winter by Pettitt Construction, a roofing company in Pullam, who has donated their fee. Lead was discovered on the roof of the passenger car and Air Technology was hired to provide advice as to how we can move forward. The material on the ground proved to be safe, but plans are underway for its removal. Work on the project will resume in the spring. A $5000 grant was received from Avista for the train project. Results from the application for T-Mobile grant will be known in December.

The depot will host a workshop on November 20th to learn about applying for historic building status in Pullman. It is organized by the City of Pullman Historic Preservation Commission and invites people to a hands-on workshop on how to complete a Nomination Form for the Pullman Register of Historic Places. The E&E Committee has added a new display to honor Veterans Day and is planning the annual Holiday Bazaar.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