



## **Growing Oaks & LIVE**

### **Acorn Hub Manager Guide**

**Contact Us: [growing-oaks@willamette.edu](mailto:growing-oaks@willamette.edu)**

## Growing Oaks Project Acorn Hub Manager Guide

The purpose of this document is to outline the duties and responsibilities of managing a LIVE Acorn Collection Hub. A Hub will serve as a central location where individuals can drop off acorns and have them stored in a way that maximizes viability. The Hubs will have designated acorn-bagging stations and bag drop-off locations. The function of the Hubs is to streamline the collection process and, in doing so, promote the reintroduction of Oregon Oaks that have been historically removed. Wineries tend to house many Oregon Oak trees, however, their population has drastically dwindled due to expansion of the wineries.

Oregon Oaks sequester a significant amount of carbon, more than any other species in the Willamette Valley. Increasing their population will assist the Valley in achieving carbon neutrality. Because only a small percentage of acorns actually germinate and develop into viable saplings, it is necessary to collect acorns well in excess (up to ten times) of the number of trees we hope to produce. For that reason, the Hub's goal is to collect 10,000 acorns per collecting season, with a target of planting up to 1,000 trees annually.

By managing a Hub you acknowledge that:

- You are working with LIVE and Willamette University's "Growing Oaks"
- You will post sufficient and accessible signage
- The Hub will be in a noticeable location that is protected from rain or other water sources

The Hub manager is responsible for:

1. Picking an appropriate location for the Hub
2. Maintaining and monitoring the Hub
3. Ensuring supplies are kept fully stocked; if not they will contact [chris@livecertified.org](mailto:chris@livecertified.org)
4. Contacting either Chris or Growing Oaks with any questions/concerns

Monitoring the Hub includes: 1) frequently checking the stock of supplies, 2) noting how many acorn bags are ready to be picked up for distribution to Willamette University and 3) reviewing Hub activity. One - It is the manager's responsibility to ensure that the supplies listed in Table 1 do not fall below the specified amounts and to restock as necessary. Two - When acorn bags need to be picked, in August-December, after a week, please send an email to [growing-oaks@willamette.edu](mailto:growing-oaks@willamette.edu) notifying of the need for acorn bags to be picked up. From January-July, please only email time if acorn bags are not picked up within three weeks. Maintenance of the Hub includes repair, as well as restocking any low or missing supplies.

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**Acorn Collection and Storing Process at the Hub:** Acorn collection can occur at the hub or acorns can be dropped off at the hub. For the first option continue reading at #1 and for the second option skip to #2

- 1) Once at the Hub, supplies are provided. For collecting, you will need a container to hold acorns and an acorn intake form for each tree you collect from. This form will be taped to each vermiculite bag later to identify the origin of the acorns. If you have multiple trees in one small area and can't differentiate which acorns on the ground came from which tree, label the bag with the range of tree numbers (example: Zena A 2-5 trees). Label bags with the date, given/created tree ID and bag number if there are multiple bags for one tree. Refer to Figure 1A for an example. Collect acorns using the above criteria and place into bags.
- 2) Storing Acorns in Vermiculite: You will fill ziplock bags with acorns; each bag can hold approximately 30 acorns. Each bag will be differentiated by tree so if you collect from 5 trees, you will use 5 bags. However if you collect more than 30 acorns per tree then make sure to use additional bags to evenly distribute 30 acorns per bag. You will want to use as many bags as necessary given the amount of trees and acorns you collected. Label each bag with the date, given/created tree ID and bag number if there are multiple bags for one tree, and the number of acorns in each bag. Refer to Figure 1B for a labeling example. Attach the form to the bag. Using the scoop, place vermiculite into each labeled bag. Refer to Figure 2 for a visual guide to organizing the acorns into the bags. Add a ½-inch layer sufficient to cover the whole bottom of the bag. Then sit the acorns into that layer leaving about an inch between each acorn. Next, place another ½-inch vermiculite layer on top of those acorns to fully cover them. Continue this layering process until the bag is "full". Typically five layers fit in a gallon ziplock bag and four acorns fit in each row with space in-between them. Leave some extra space at the top of the bag so it isn't stuffed to the point of exploding. Finally, place the bag(s) of acorns filled with vermiculite with the completed Acorn Intake form in the designated Hub area.
  - a) Materials needed found at hub: Vermiculite (coarse-ground) to keep the acorns viable for germination. Ziploc Freezer Gallon Plastic Bags to hold the acorns in the vermiculite while in storage. Sharpies to label bags with the Date, Tree ID, and Bag Number. Small hand-held shovels to scoop the vermiculite into the bags. Acorn Intake Forms to record information about the tree you collected from.

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### Supplies needed to start the Hub:

<u>Item</u>	<u>Purpose</u>	<u>Amount at Hub</u>	<u>Other notes</u>
Gallon Ziplock bags	Storing acorns in bags that are easy to move	One box of gallon bags per hub at all times	Regularly check stock as the used bags will be
Sharpie marker	For labeling bag	A couple in case multiple people want to collect at once	Periodically check stock and if have ink
Scoop/Small Hand Shovel	For transferring vermiculite to gallon bags	One per hub	-
Vermiculite	Fills empty space in bags, to keep moisture out and acorns viable	4 cu ft. sized bags (x3), Coarse ground	Regularly check stock as the used bags will be
Signage for Hub	Hub name, logo for LIVE, logo for Growing Oaks, QR code	1 per hub	-
Small container	To hold small materials: zip lock bags, sharpies, scoop	1 per hub	-
Container or area to hold paper documents	To hold 1) collection protocol 2) honorable harvest document	1 per hub	Could be multiple documents available for people to pick up or one double sided document
Large container	To hold many gallon ziplock baggies	1 per hub	Could be an empty oak wine barrel, an empty wine crate or other material of your choice

Table 1: Supplies needed at each hub. \* items will be provided by Growing Oaks PDF to be printed out by the manager and posted at each hub.

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Figure 1A Example of the labeling on bags for acorn collecting.

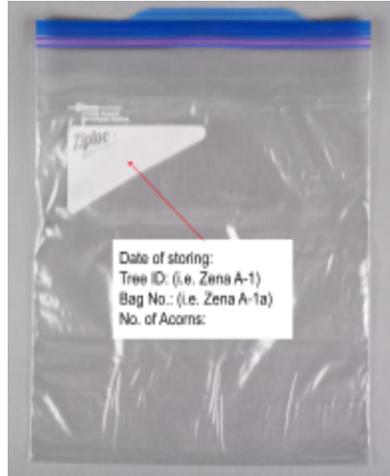


Figure 1B Example of the labeling on bags for acorn storing with vermiculite.



Figure 2 Example of how to store the acorns in the vermiculite.