

NEWSLETTER

ALTA ENVIRONMENTAL CENTER

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Forest Health at Alta

The Alta Environmental Center (AEC) encourages responsible development with environmental conservation in mind. We can't do it alone - our partners are key in helping take care of the land within the ski area. The U.S. Forest Service (USFS), whose land we operate on and one of our partners, provides guidance and invaluable information on managing the forest resources.

In July 2020, AEC staff and representatives from the USFS Forest Health Protection Office based in Ogden, Utah, joined together for a socially-distanced field visit to assess the current health of the forest within Alta Ski Area.

What is Affecting the Trees?

Many impacts to forest resources throughout the Wasatch Range are due to insects and disease. Different types of beetles have been a significant cause of tree mortality and different levels of tree damage throughout the Wasatch Range, including Alta. The types of beetles that have been observed at Alta affect the layer just under the bark (or the "phloem layer") and are not wood-boring beetles. At Alta, we have seen evidence of:

[Western Balsam Bark Beetle \(*Dryocoetes confusus* \[Swainel\]\)](#): This beetle targets true firs, which includes subalpine firs (*Abies lasiocarpa*) at Alta. This beetle tends to affect the entire tree and often results in tree mortality over time. Unhealthy firs with dead needles from top to bottom are a good indicator that this beetle has taken residence.

[Spruce Beetle \(*Dendroctonus rufipennis*\)](#):

This beetle targets spruce trees, specifically the Engelmann spruce (*Picea engelmannii*). This beetle does not appear to cause the level of mortality similar to the Western Balsam Bark Beetle at Alta. This beetle tends to only affect parts of the tree, causing dead needles on only those specific areas. However, if infestations are significant, tree mortality can occur. (Continued on next page)



Evidence of the different beetles on trees at Alta. Beetle "galleries" (left) and tiny holes (right) are signs that beetles have infested a tree.

Tree Health Continued:

Twig Beetle: Twig beetles attack conifers, which include pine, true firs, Douglas firs (*Pseudotsuga menziesii* Franco), and spruce trees. Per its name, the twig beetle tends to attack small branches and twigs, and generally only parts of the tree are affected.

Balsam Woolly Adelgid (BWA; *Adelges piceae*): This is an insect that was first observed causing mortality to subalpine firs in northern Utah in 2017, with evidence of spread into Little Cottonwood Canyon within the last year. Unfortunately, the presence of this insect is difficult to detect until a tree is heavily infested, and the insect is easily dispersed by wind, further complicating control of its spread. On top of that, all adelgids are females and have the ability to reproduce without mating, quickly creating an infestation. Not much is known on how to effectively manage this insect, making it harder to address its impacts at this point in time. Signs of the BWA include abnormal/asymmetrical bulging or gouting on trees. (See photo above)



What Can You Do?

In general, a healthy forest ecosystem is less susceptible to impacts from the various insects and diseases that affect tree health. Luckily, there are indirect ways you can help to keep the forest healthy while visiting and recreating at Alta. Keeping native vegetation thriving at Alta supports a healthy ecosystem. For example, noxious weeds and invasive plants are able to easily establish and spread to disturbed areas and outcompete native vegetation. Infestations of noxious weeds and invasive plants contribute to the disruption of a normal functioning ecosystem, which often affects the vegetation and trees. Disrupted ecosystems result in less healthy trees which may be more susceptible to insects and disease. By staying on the trail, not picking or stepping on the wildflowers, and not disturbing the vegetation, you are helping to keep the forest ecosystem healthy.

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.” -Margaret Mead

EVENTS

DIVERSITY, EQUITY, AND INCLUSION IN THE OUTDOORS WITH TERESA BAKER SEPTEMBER 14 - Learn about equitable access to outdoor spaces and how companies and organizations can make outdoor spaces feel more welcoming to underserved communities. An event organized by ACE. altaarts.org/events/teresabaker2020

NATIONAL PUBLIC LANDS DAY SEPTEMBER 26 - Visit a national park for free! Or, volunteer for a park work project and receive a fee-free coupon to be used at a later date. nps.gov/subjects/npscelebrates/public-lands-day.htm

TRACY AVIARY MOVIE WITH THE BIRDS SEPTEMBER 4 & 19 - Bring the whole family down to Liberty Park to enjoy a movie in the park, a picnic dinner, and educational activities presented by our wonderful partners at Tracy Aviary. tracyaviary.org/events