

WAITSFIELD CONSERVATION COMMISSION
Intervale Conservation Nursery
Friends of the Mad River
Mad River Path Association

The Austin Parcel:
Removing Invasive Plant Species and
Restoring Floodplain Forest
October 2018

Background

The history of the Austin parcel (just downriver, or north, of the Lareau swimming hole on Route 100) is in many respects the history of the Valley. As the scattered subsistence farming that marked our region's early settlement transitioned to more intensive use of natural resources, the Mad River drew enterprise for its power generating capacity. Intensive agriculture relocated from the hills to richer, level soils on the Valley floor and remaining forests were cut and transported to mills dotting the river. A sawmill was located near the Austin parcel and what is now Irasville and people straightened the river to more easily float logs to this sawmill. The old bobbin mill in Warren was an early and lasting effort to manufacture useful products from the plentiful timber. The Waitsfield Historical Society created a video, "As We Were" (<https://www.youtube.com/watch?v=zu4JAY4V3UQ&feature=youtu.be>), to present the Town as it was during the period of perhaps its most intense activity, 1870-1915. The Society also manages a portfolio of glass negative reproductions, available from its website (<https://www.waitsfieldhistoricalsociety.com/>), that show vividly how open and unforested the Town's lands were 100 years and more ago. Vermont was approximately 20% forested then, and today has returned to 80% forested.

Timber on the Austin Parcel, at the confluence of Mill Brook and the Mad River, was extracted and the once-forested floodplain became a meadow for animal grazing and then haying. With the river's adjustments after having been straightened and the increasing precipitation since the 1970s came more flooding, carrying stone cobble and debris into the riparian (riverside) lands and interfering with traditional agriculture uses. After Tropical Storm Irene's devastation in 2011, haying became challenging at the Austin Parcel and by 2015, the Town of Waitsfield had acquired the property and developed and published a management plan for it as part of the Wu Ledges Town Forest (http://waitsfieldvt.us/wp-content/uploads/2017/08/Wu_Ledges_Forest_Management_Plan_Feb2015_approved.pdf), which extends uphill across the Mad River from the Austin Parcel. This plan includes valuable information and management objectives for the Austin Parcel adopted by the town in a public process.

Today's environment at the Austin Parcel

The five-acre parcel is characterized by rich loamy soils, but also by wetland and swampy areas. Invasive plant species such as reed canary grass, buckthorn, and honeysuckle have colonized throughout the parcel, with the Mad River obscured by a tall and wide band of Japanese knotweed. As haying ended, knotweed began to advance into the core area of the parcel due to its ability to

quickly establish and the challenge it presents to control. Despite its looks, knotweed is a poor replacement for native riparian shrubs and trees when it comes to its capacity to hold the soil, provide cool aquatic habitat, and diverse terrestrial habitat, and slow flood waters. In sum, invasive plant species have come to dominate the parcel, displacing the important functions of a native floodplain forest.

Planning and management objectives

In 2015, as mentioned above, the Town of Waitsfield adopted a management plan that incorporates the Austin parcel and calls encouraging its return to riparian forest. The plan presents some history of the area, its environmental conditions, and goals for management. Primarily, as it relates to the Austin Parcel, the plan triggered further site analysis by 1) the Vermont Land Trust, which created a thorough report about invasive species management on lands including the Austin Parcel (http://www.waitsfieldvt.us/wp-content/uploads/2017/07/Austin_Tardy_Invasives_Plan_VLT_2016.pdf) and 2) the US Fish and Wildlife Service – a 2017 Floodplain Restoration Plan (http://waitsfieldvt.us/wp-content/uploads/2017/07/Austin_US_Fish_and_Wildlife_Service_Recommendations_Sept2014.pdf) that includes planting recommendations for the core 0.8 acres of the parcel.

Taken together, these analyses supported an initiative by the Waitsfield Conservation Commission to restore floodplain forest, requiring control and removal of invasive plant species, at the Austin Parcel. The Commission requested proposals for invasive species management and tree planting in January 2018, calling for non-chemical management. The Commission signed a contract with the Intervale Conservation Nursery that features invasives management and forest restoration in 2018-19, in cooperation with Friends of the Mad River and the Mad River Path Association. The plan and the contract also include the maintenance of a mowed buffer area around the restored floodplain forest. The mowed area, as recommended by restoration experts such the Fish and Wildlife Service, should (if maintained over the course of decades) reduce the viability and aggressiveness of the Japanese knotweed that threatens the viability of the restored interior area.

The plan aims to help improve downstream flood resilience by creating a more natural floodplain that will absorb floodwaters, restore native plant species that help maintain clean water and support native fauna, support migratory birds, feed pollinators, and improve instream conditions for fish and other aquatic biota. The list of native shrub and tree species can include species of willow, birch, alder, dogwood, cherry, oak, and maple which will support important floodplain functions.

The public is invited to walk the mowed buffer, to explore the Austin parcel, and to help with invasive species management and tree planting and maintenance. The Waitsfield Conservation Commission is dedicated to long-term management that will involve Valley residents, and that will provide a demonstration project for landowners who are interested in control of invasive species and regeneration of native floodplain forest conditions.

FOR MORE INFORMATION please consult the Waitsfield Conservation Commission website at <http://www.waitsfieldvt.us/conservation-commission/>. You can also contact the Commission's Austin parcel invasives management working group, Mark Haberle, at mhaberle@gmavt.net