

Sharing the difference CSU Extension makes in people's lives and their communities.

Helping Residents Understand Changing Forest Ecosystems

CSU Extension programs in Gilpin County provide residents and community leaders with the information they need to respond to the widespread effects of the mountain pine beetle epidemic.

Situation

In early 2008, foresters predicted that the mountain pine beetle (MPB) epidemic spreading throughout Colorado might kill up to 90 percent of Gilpin County's lodgepole pine forests. Landowners in this mountainous region of the central Front Range had an urgent need to respond with credible and reliable information. Meanwhile, county decision makers faced growing forest management concerns.

Extension's Response

Irene Shonle, natural resources agent and director for Colorado State University Extension in Gilpin County, has addressed these issues since 2008 by organizing educational programming and outreach, providing technical assistance, and collaborating with regional agencies.

Educational Programs & Outreach

- Providing 19 hands-on workshops, programs and presentations on pine beetle ecology, creating defensible space, fire preparedness and planning, using a chainsaw safely, creating diverse and resilient landscapes and other relevant topics. More than 1,000 area residents have attended programs.
- Answering 1,673 e-mail, phone and walk-in questions about MPB and forest management.

Technical Assistance

- Facilitating a countywide Community Wildfire Protection Plan (CWPP), adopted in 2009.
- Providing improved residential transport and recycling of MPB-affected trees. In 2008, Shonle encouraged county commissioners to purchase a wood chipper that could process logs as short as 4 feet. Previously, a rented chipper could only process logs 12 feet or longer. Chipped wood heats the biomass boiler in the county road and bridge building.
- Coordinating annual tree seedling sale to reforest private land. Landowners purchased 11,660 trees through the Colorado State Forest Service.

Regional Collaboration

- Shonle represents CSU Extension and Gilpin County on the Northern Front Range Mountain Pine Beetle Working Group. Interagency members coordinate MPB mitigation across county lines to ensure consistent messaging and public information, and educate community decision makers.
- Extension agents and other natural resource representatives work together to deliver forest-related workshops and programs in nearby counties such as Jefferson and Boulder.



The Bottom Line

- Gilpin County Extension helped citizens and decision makers understand and respond to wide spread tree mortality and related forest management issues caused by the mountain pine beetle epidemic.

By the Numbers

- Estimated acres of Colorado forest lost to MPB epidemic: 4 million
- Forest-related questions answered by Gilpin County Extension from 2008–2010: 1,673
- Number of tree seedlings planted by county citizens from 2008–2010: 11, 660
- Number of Gilpin County residents: 5,000

Results

Shonle's responsive leadership, educational programming and forest management recommendations have meant that local residents and government officials were able to make informed decisions and cope with unprecedented forest change. These efforts led to:

Improved Public Understanding & Community Safety

- Gilpin County Extension programs offered research-based, scientific information that explained how and why the epidemic happened, and what to possibly expect. Programs also shared best practices that helped residents reduce the possible threat of fire, mitigate the pine beetle's spread and create diverse and resilient landscapes.
- Program evaluations indicated that more than 50 percent of all attendees intended to use the information they learned to educate home owners associations, participate in CWPP mitigation projects, create defensible space around homes, develop an evacuation plan, volunteer for community MPB management projects, and share information with neighbors and friends.
- Front Range elected officials became more informed about MPB-related community issues, such as hazardous trees, declining property values and the threat of fire.
- By developing a CWPP, county and community stakeholders identified fire hazards and risks facing communities in the Wildland Urban Interface (the area where wildland and human development overlap), and set priorities for mitigating those risks and improving community safety.

Economic Benefits: Cost Savings & Grant Funding

- Landowners helped offset the amount of woody biomass the county had been purchasing to fuel the road and bridge boiler by 75 percent (450 tons). Residents have an incentive to remove dead trees since dead and dying tree drop off at the new wood chipper is free. According to Shonle, this service is providing a quicker payback on the boiler expense. Also, tree removal and chipping may have reduced the spread of MPB.
- Because the county adopted a CWPP, its government and citizens are eligible to apply for and receive funding that targets planned fuels mitigation projects.
 - The CWPP made it possible for Anchor Point, a fire management consultant group, to receive \$250,000 of American Recovery and Reinvestment Act grant funding for high priority tree thinning and fuel break projects on 73 acres of Gilpin County public and private land.
 - The CWPP also enabled the county to acquire a \$48,000 Wildland Urban Interface grant from the Colorado State Forest Service to thin 52 acres of county-owned land and continue implementing the CWPP.

"The seminar was packed with a lot of helpful information about history...the BIG picture and the future. I feel way better informed now and walk over my property with a different view."

– Gilpin County Resident

Learn More

View the Gilpin County CWPP:
www.co.gilpin.co.us/Commissioners/GilpinCWPP.pdf

Program Partners

Boulder County
Boulder County Extension
Colorado State Forest Service
Northern Front Range MPB Working Group

Contact Information

Irene Shonle
CSU Extension, Gilpin County
County Director
(303) 582-9106
irene.shonle@colostate.edu
www.extension.colostate.edu/gilpin