2023 REPORT ON THE HEALTH OF COLORADO'S FORESTS

Each year, forest health reports provide information to the Colorado General Assembly and the general public about the health and condition of forests across Colorado, as well as the progress the Colorado State Forest Service is making in addressing critical forest health issues in our state.

Statewide Forest Health Issues

Insects and Diseases

Monitoring Forest Management

Good Neighbor Authority
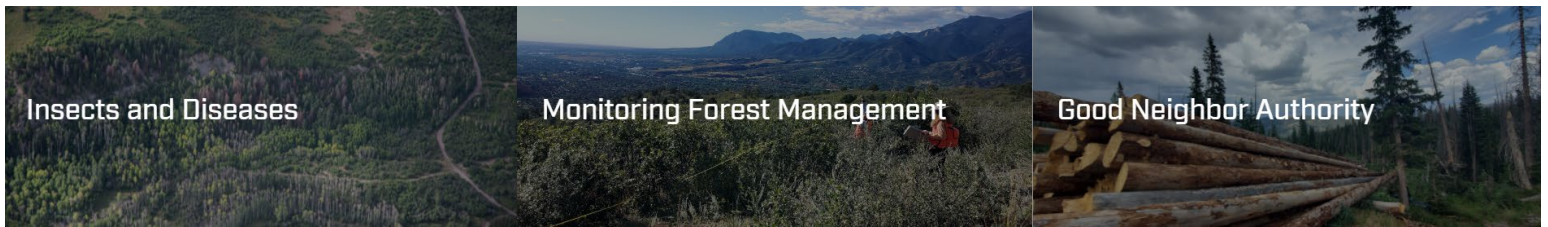
Forest Health Issues by Region of Colorado

Across Colorado, the Colorado State Forest Service is working with residents, communities and partners to improve forest health on a local level.
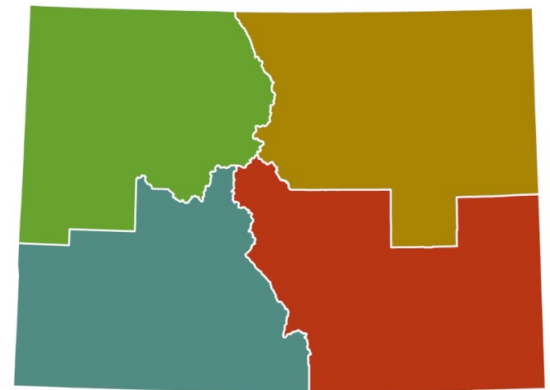
Ensuring Healthy Forests & Vibrant Communities in Colorado

State funding through the Healthy Forests & Vibrant Communities Act supports the Colorado State Forest Service's efforts to help landowners, communities and partners address their wildfire risk and assess forest and watershed health. The CSFS provides technical assistance to prepare residents for wildfire, market wood products, and deliver geospatial data and information on forest management to the public.

View the 2023 Healthy Forests & Vibrant Communities Report to learn how the CSFS used funding provided by this Act to ensure the long-term health and vitality of Colorado's forests.

On the Right Path to Make Colorado Wildfire and Recovery Ready

The clock is ticking. In the era of megafires, Colorado's foresters must move quickly to prepare residents and communities for wildfire and be ready to recover and replant after fires. Last year was cooler and wetter than recent years in Colorado, with fewer large fires, but we cannot let our guard down. All that precipitation left more wildfire fuels in forests and around our communities, and we know future wildfires are not a question of 'if', but 'when'.

In this report, we highlight how outbreaks of forest pests are expanding their footprint and leaving more dead trees and wildfire fuels in their wake. One milder year is not enough to reverse trends from the compounding effects of decades of insect outbreaks and a warmer, drier climate in Colorado. We know more people are moving into wildfire prone areas and they will need outreach, education and resources to live wildfire ready.

We also know that Colorado is on the right path. At the Colorado State Forest Service, we have leveraged sizeable investments from the General Assembly, supported by Governor Polis, to broaden our reach and deepen our impact for Coloradans across the state.

At the CSFS, we are showing up where the work needs to be done to help residents, communities and partners improve forest health, protect watersheds and ensure Colorado is wildfire and recovery ready.

– Matthew M. McCombs, State Forester and Colorado State Forest Service Director

State Advances Strategies to Protect the 'Soul of Colorado'

Since Colorado's devastating 2020 wildfire season, the Colorado State Forest Service, Department of Natural Resources and other state agencies have advanced their strategies for protecting our forests and communities.

Support from the Colorado Legislature helped create the Colorado Strategic Wildfire Action Program and Wildfire Ready Watersheds, fund the Colorado State Forest Service's Forest Restoration and Wildfire Risk Mitigation grant program with an annual allocation of $8 million, and helped the state acquire two Firehawk helicopters to assist wildfire suppression efforts. This support is enabling landscape-level, cross-boundary forest management and restoration efforts statewide.

Colorado's forested watersheds are our future water supply. The health of watersheds affects agriculture, downstream communities, recreation, tourism and ecosystem function. Colorado follows a shared stewardship ethic to plan and implement multi-benefit projects to enhance the health of our watersheds. A striking 80 percent of Colorado residents rely upon forested watersheds for municipal water supplies.

Director McCombs and I work on forest health issues through shared stewardship from the lens of doing the right work in the right places at the right scale. Forests are the soul of Colorado, and I am proud of the work that the Colorado State Forest Service and other state, federal and local partners are doing to ensure their health.

– Dan Gibbs, Colorado Department of Natural Resources Executive Director

Insects and Diseases

Forest Pests Continue to Spread in Colorado Despite Milder Year

Colorado experienced wetter, cooler conditions in 2023 compared to recent years. This was good for many species of trees in areas of Colorado suffering from prolonged drought, but trees will need several years of adequate moisture and lower temperatures to recover, regain their health and ward off attack from bark beetles and other forest pests. Populations of bark beetles and western spruce budworm remain high in forests and a milder year is not enough to reverse recent trends.

Western spruce budworm remains the most widespread forest pest in Colorado, according to aerial survey data from the Colorado State Forest Service and U.S. Forest Service Rocky Mountain Region. Data from the aerial survey also indicate that western balsam bark beetle remains the deadliest forest pest for the second year in a row, despite it impacting fewer acres of Colorado's forests in 2023.

Thousand-Foot View of Forest Health

Since the 1950s, forest managers have flown over Colorado to detect and monitor disturbances to forests from insects and diseases, collecting data that provide an annual snapshot of forest health. With this information, managers can see how and where bark beetles and other pests are moving across the landscape and proactively manage these forests to lessen their impacts.

The aerial survey crew fuels its aircraft on an airstrip in Telluride before taking to the skies to survey insect and disease damage to forests. Photo: Dan West, CSFS

Western spruce budworm remains the most widespread forest pest in Colorado, according to aerial survey data from the Colorado State Forest Service and U.S. Forest Service Rocky Mountain Region. Data from the aerial survey also indicate that western balsam bark beetle remains the deadliest forest pest for the second year in a row, despite it impacting fewer acres of Colorado's forests in 2023.

Last year, trained aerial observers with the CSFS and USFS flew over 36.6 million acres of Colorado's forests in small aircraft. Forest managers then ground-checked some of the areas spotted during flights to verify the insect or disease responsible and the severity of the damage.

Aerial observations and on-the-ground assessments showed that, overall, bark beetles and other forest pests continue to expand their footprint into new forests as outbreaks persist.

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Wetter, Cooler Conditions Overall

Weather plays an important role in insect and disease activity. During periods of drought, trees are unable to produce enough resin to fight off insects trying to bore through the bark. At the same time, warmer temperatures place more demand on trees for water to offset evapotranspiration, the process in trees of "breathing" where trees release water vapor into the air. Ongoing drought and above-average temperatures are a recipe for stressing trees and leaving them susceptible to attack from bark beetles and other forest health issues.

While needing several years of adequate precipitation to build defenses against pests, trees in parts of Colorado did receive a respite from drought conditions last year. Data from the National Oceanic and Atmospheric Administration show 20.02 inches of precipitation pouring into Colorado during the 2023 water year (Oct. 1, 2022, to Sept. 30, 2023), compared to the 100-year average of 18.10 inches.
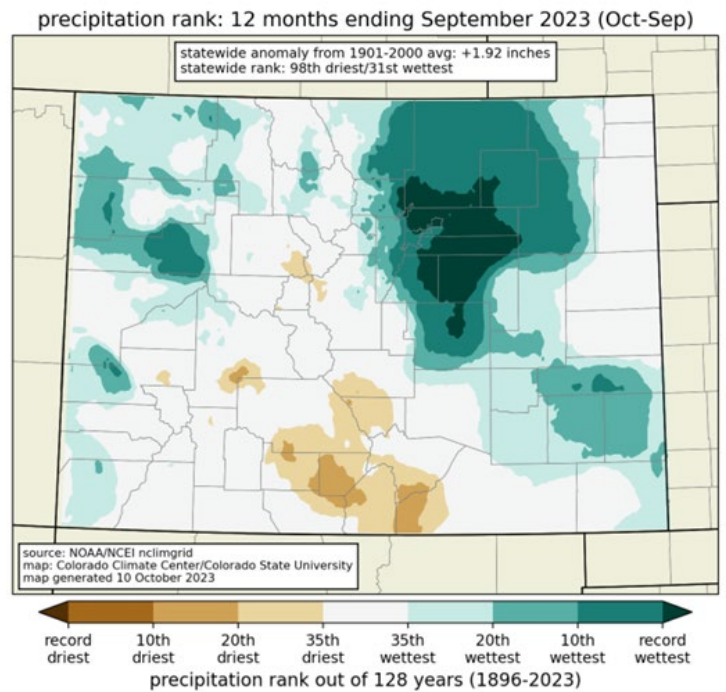

Despite a wetter year, not all of Colorado received adequate precipitation. Rain drenched the Front Range from May through early August to set records, while conditions remained drier than normal in the San Luis Valley. Map: Colorado Climate Center, Colorado State University. Data: National Oceanic and Atmospheric Administration

For the 2023 water year (Oct. 1, 2022, to Sept. 30, 2023), Colorado experienced its coolest since 2010, according to NOAA. Temperatures, on average, were the coolest in 13 years, though still above the 100-year average. Fall temperatures warmed up statewide with above or much-above the 100-year average, while precipitation was below to near average in the fall, according to NOAA.
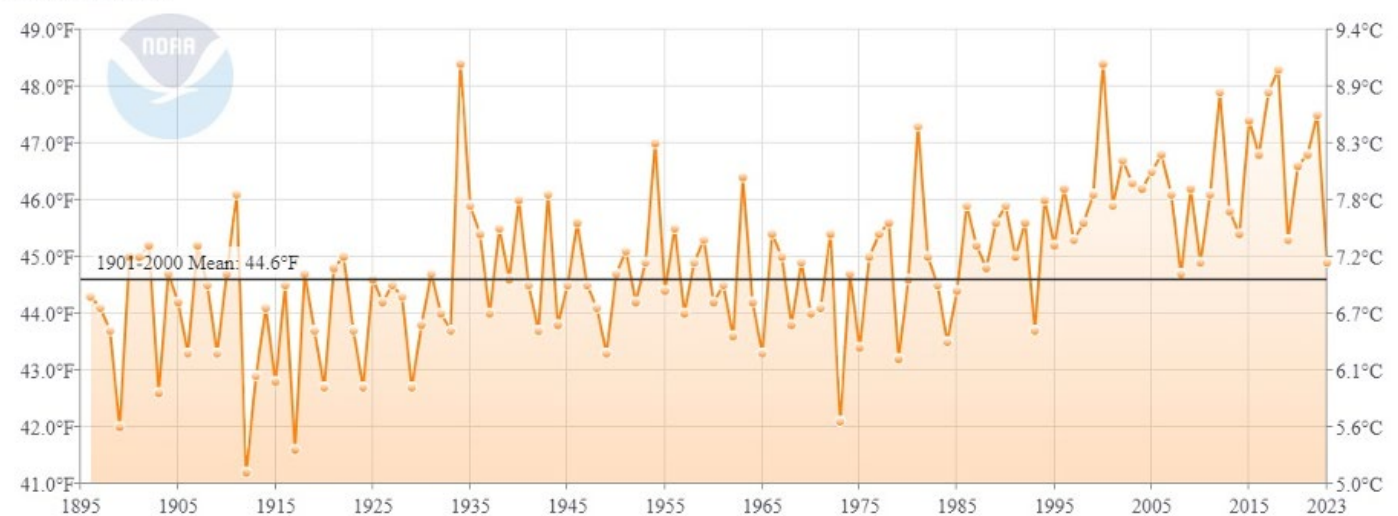

While hotter than the 100-year average, temperatures statewide in Colorado last year were cooler than the previous decade. Graph: National Oceanic and Atmospheric Administration

Slightly Tardy, But Still Active

A cool, wet spring delayed most species of bark beetles by 2-3 weeks from emerging out of infested trees to seek new ones to attack. As summer temperatures warmed, adult beetles emerged from trees in July through August, slightly tardy but with sufficient time to fly to new host trees.

Mountain Pine Beetles Captured in Traps at Red Mountain Ranch, Gunnison County, 2023
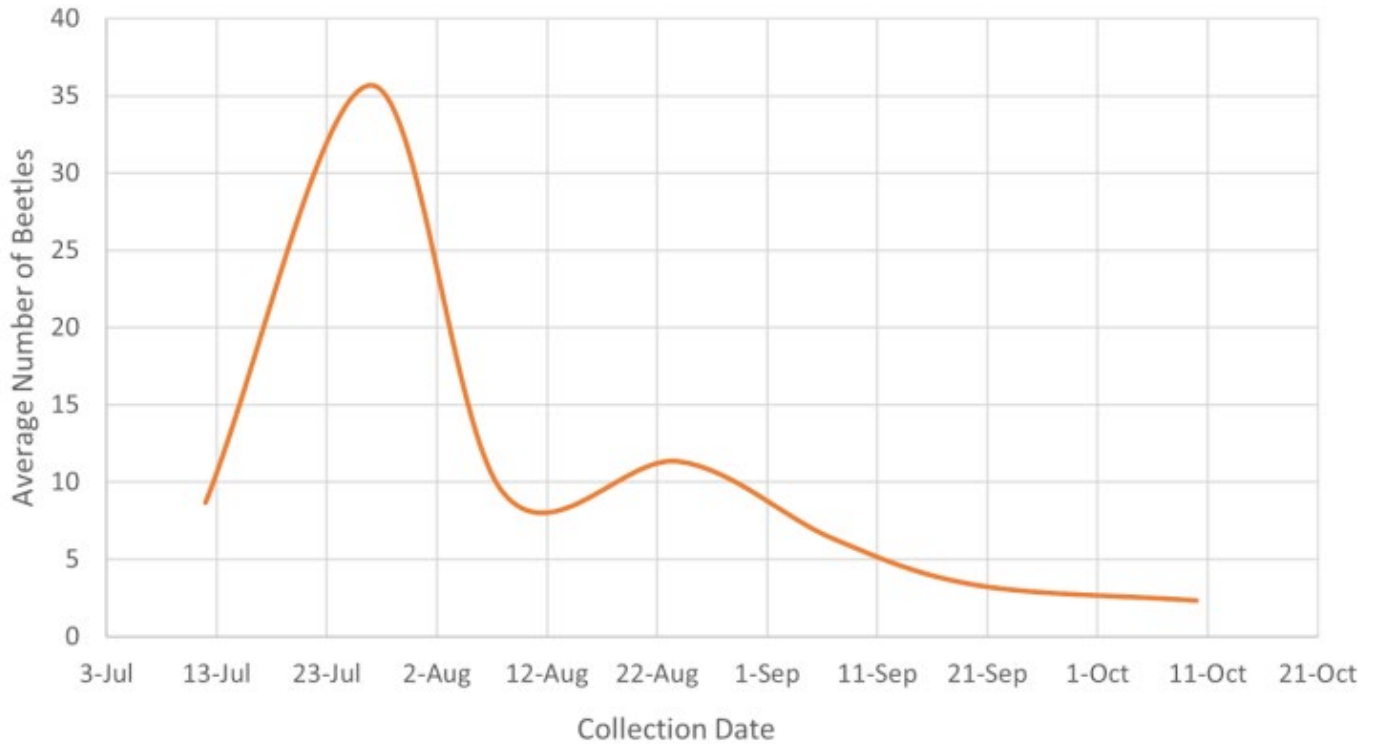
The emergence of adult mountain pine beetles peaked in late July 2023 at Red Mountain Ranch in Gunnison County between Gunnison and Crested Butte, as indicated by the average number of beetles caught in traps set by the Colorado State Forest Service. Graph: Dan West, CSFS

Bark Beetles on the Move

Both the Douglas-fir beetle and mountain pine beetle impacted more acres of forests in 2023 than the prior year, according to aerial survey data. Localized drought conditions continue to leave forests riddled with water-stressed trees ripe for attack. As long as populations of these native bark beetles remain high in forests, the threat persists to Douglas-fir and pine trees, particularly ponderosa.

Aerial observations from the CSFS and USFS show a decrease in acres impacted by western balsam bark beetle, down from 35,000 acres statewide in 2022 to 27,000 in 2023. It is still the deadliest forest pest in Colorado, however, as it affected more acres than any other bark beetle last year.

This forest in the west-central San Juan Mountains in eastern Dolores County is riddled with dead and dying trees attacked by Douglas-fir beetles. Photo: Dan West, CSFS

Western spruce budworm, which defoliates trees but does not always kill them, continues to be the most widespread forest pest in Colorado. The budworm impacted 202,000 acres statewide last year, up from 112,000 acres of forests in 2022. This large increase in acres is likely due to the ability of aerial observers to detect damaged tree canopies from the air. In other words, warmer and drier conditions in recent years spurred budworm populations, and observers are now seeing the full impact of these increased populations as more trees succumb to the budworm.
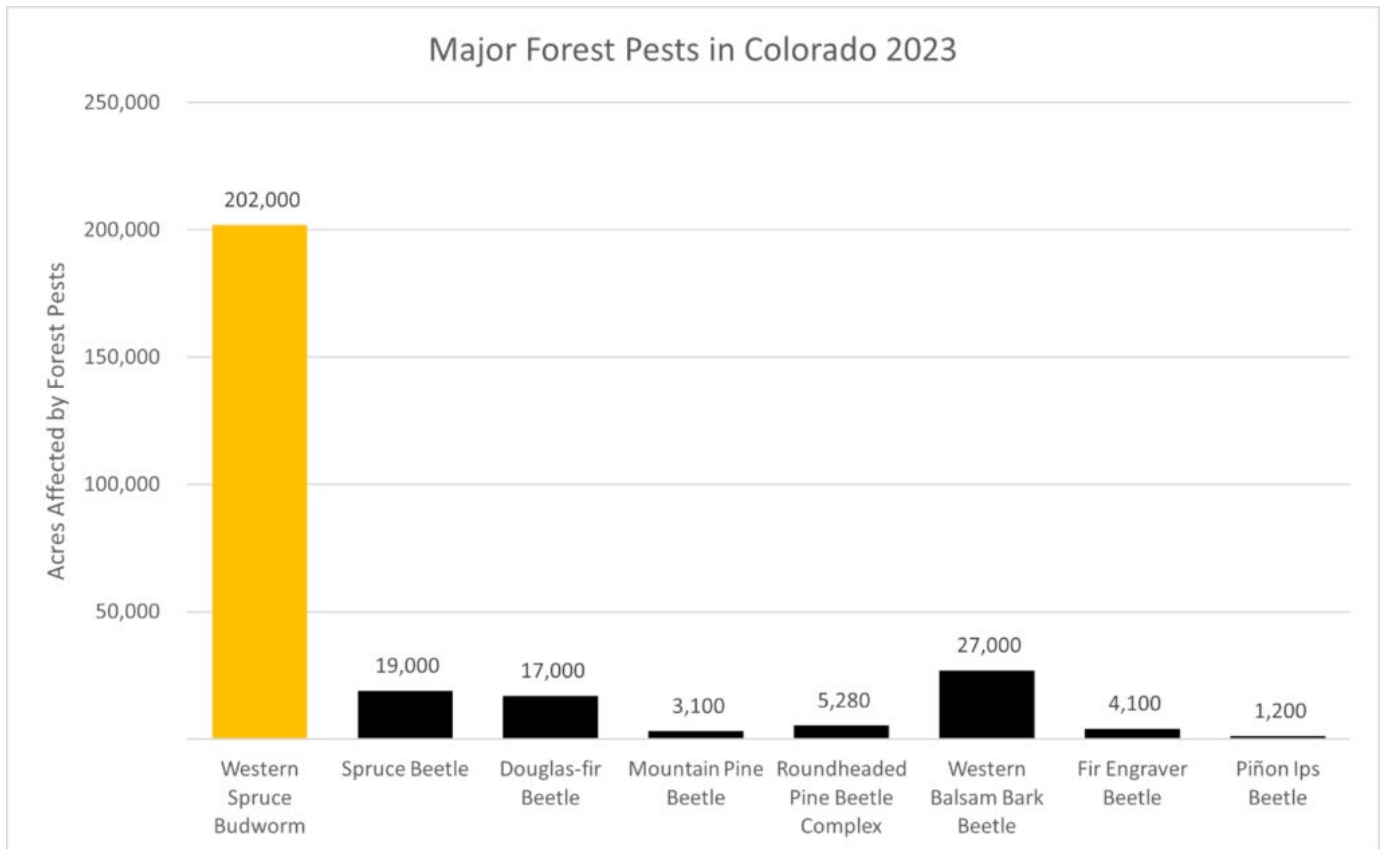
Western spruce budworm is the most widespread forest pest in Colorado. This insect affected more acres statewide in 2023 than the seven most prolific bark beetles combined. Graph: Dan West, CSFS
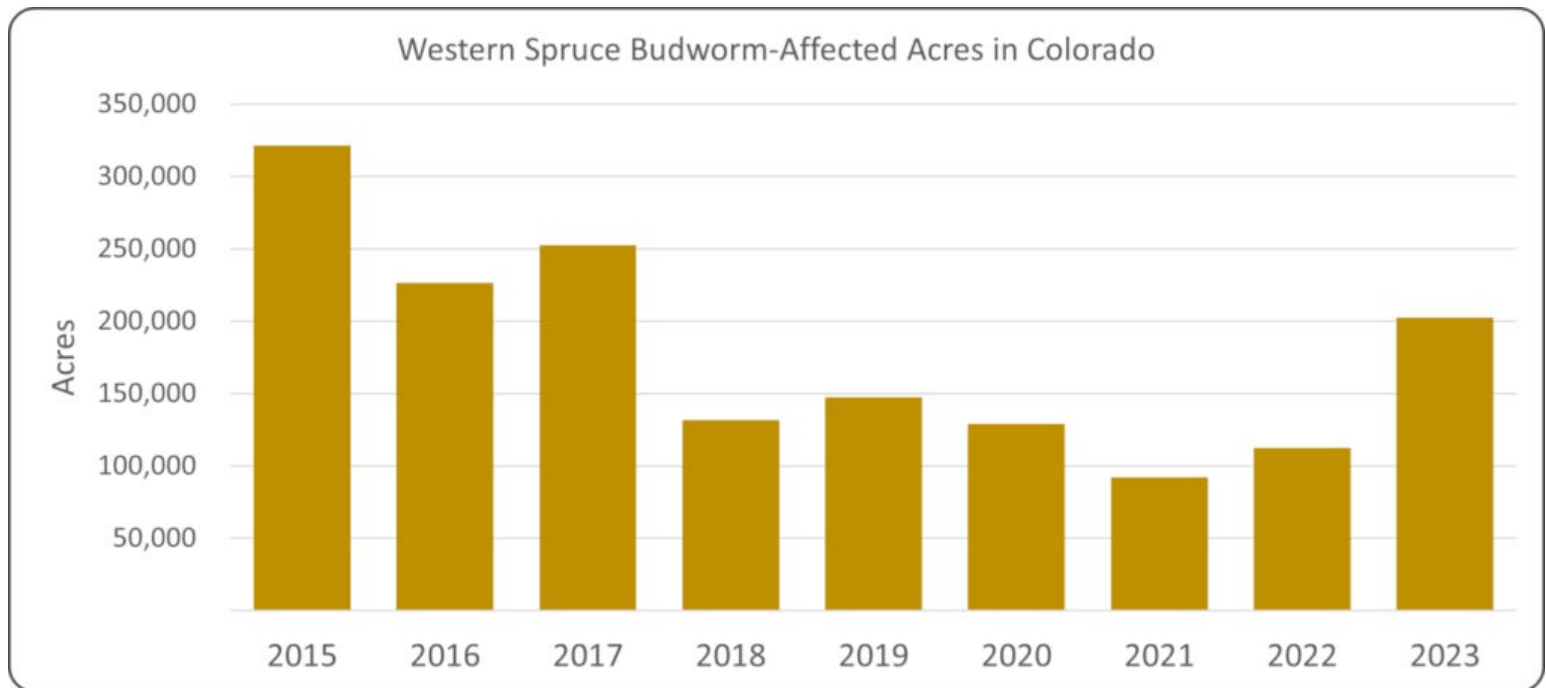
Notable Forest Pests in Colorado

Western Spruce Budworm

Acres affected statewide in 2023: 202,000

Western spruce budworm *(Choristoneura occidentalis)* remains the most widespread forest pest in Colorado. This insect is a small moth that partially consumes the needles of trees during its caterpillar stage, leaving a rust-burnt color to the damaged foliage. Trees damaged by the budworm for numerous years are at high risk of attack from the deadly Douglas-fir beetle. The budworm continues to infest forests with Douglas-fir, though it occasionally consumes the needles of white fir, Engelmann and blue spruce. It is a problem in forests across Colorado, especially in the south-central part of the state.

- Forests in Park County experienced 27,000 acres in damage from the budworm in 2023, holding steady on the number of affected acres from 2022.
- Gunnison County continues to lose more of its Douglas-fir to the budworm because of repeated consumption of foliage for more than a decade there.
- The northern Elk Mountains in Pitkin County saw an increase of 12,200 acres damaged by the budworm in 2023.
- The Grand Mesa in Delta and Mesa counties experienced noteworthy upticks of 17,000 acres and 16,000 acres, respectively, in damage by the budworm in 2023.

The number of acres affected by western spruce budworm is the highest it has been in Colorado in the last six years. Graph: Dan West, CSFS
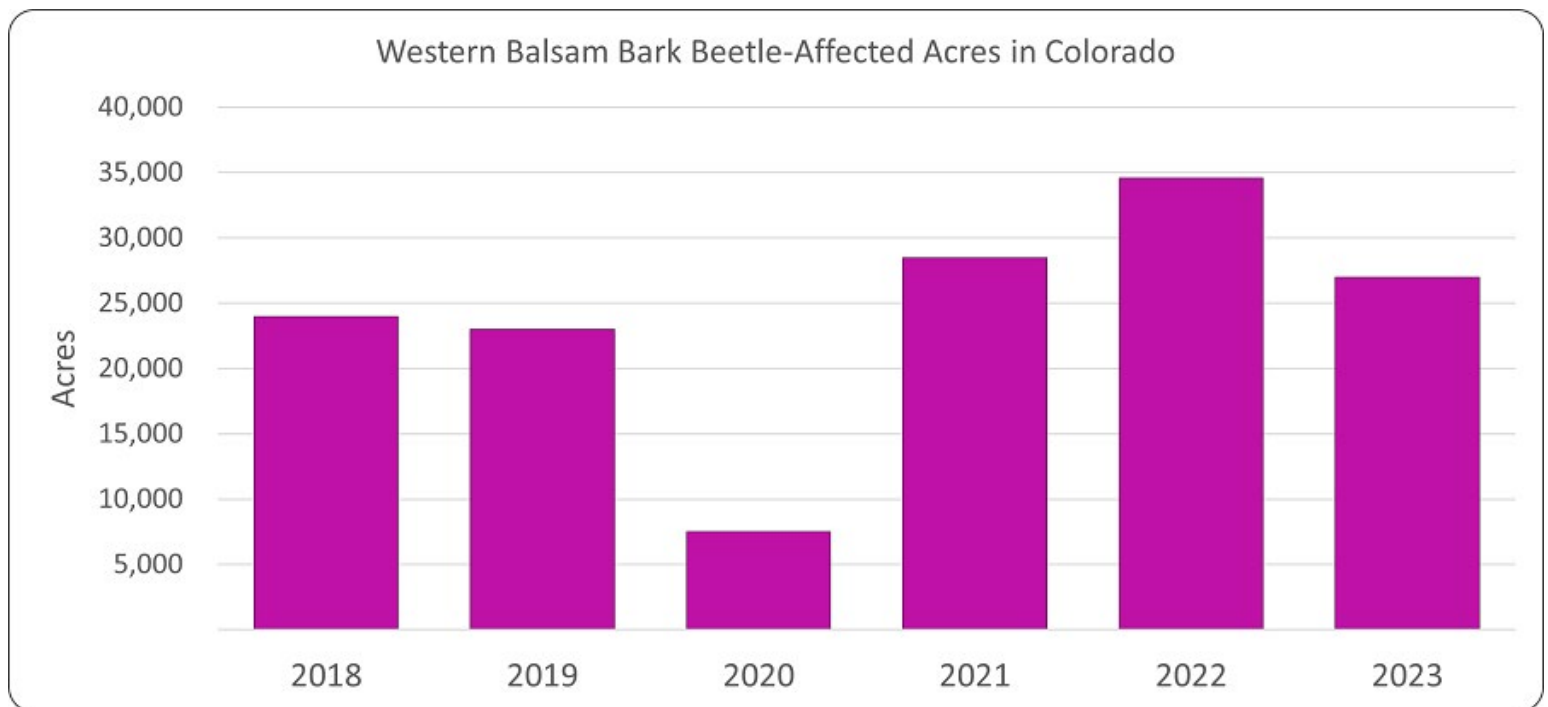
Notable Forest Pests in Colorado

Western Balsam Bark Beetle

Acres affected statewide in 2023: 27,000

Western balsam bark beetle *(Dryocetes confusus)* and associated root diseases have increased in high-elevation forests, spurred by drought and warm temperatures that make subalpine fir trees vulnerable to attack. Infestations of this beetle are patchy within a stand, but when all of these patches are added up across Colorado's forests, the impact of this native bark beetle is more apparent.

- Routt County saw a decrease in 3,700 acres affected by this beetle compared to 2022, but the county still has 4,300 acres of forests actively infested and mortality of subalpine fir is ever present in high-elevation forests there.
- Jackson County saw a decrease in acres affected by this beetle, from 2,300 acres in 2022 to 1,300 acres in 2023.
- Infestation by this beetle on the Grand Mesa continues to expand with 3,800 acres affected, up 1,400 acres from 2022.
- Eagle, Garfield and Pitkin counties continue to see groups of subalpine fir lost to this beetle across high-elevation forests.
- Gunnison and Rio Blanco counties in the central forests of the state are also notable areas of western balsam bark beetle activity again in 2023.

Western balsam bark beetle remains the deadliest forest pest in Colorado, despite it impacting fewer acres of forests than the previous year. Graph: Dan West, CSFS

Notable Forest Pests in Colorado

Douglas-fir Beetle

Acres affected statewide in 2023: 17,000

Douglas-fir beetle *(Dendroctonus pseudotsugae)* remains a significant killer of Douglas-fir trees in the state's central and southern mixed-conifer forests. Ongoing drought and defoliation from western spruce budworm play a role in leaving trees susceptible to attack from Douglas-fir beetle. Many of the largest, susceptible-sized trees in affected areas have been depleted over the past decade.

- Heavy infestations continue in Gunnison, Mineral, Rio Grande and Saguache counties.
- Intense infestations continue in the northern Sangre de Cristo Mountains of Freemont County and southern portions of the Sawatch Range within Chaffee County.
- Northern areas within the La Plata Mountains and southern reaches of the West Central San Juan mountains have nearly doubled in affected acreage this past year.
- Areas within the Roaring Fork Valley through Smuggler Mountain and around the Frying Pan and Ruedi Reservoir continue to see losses of severely affected Douglas-fir stands.
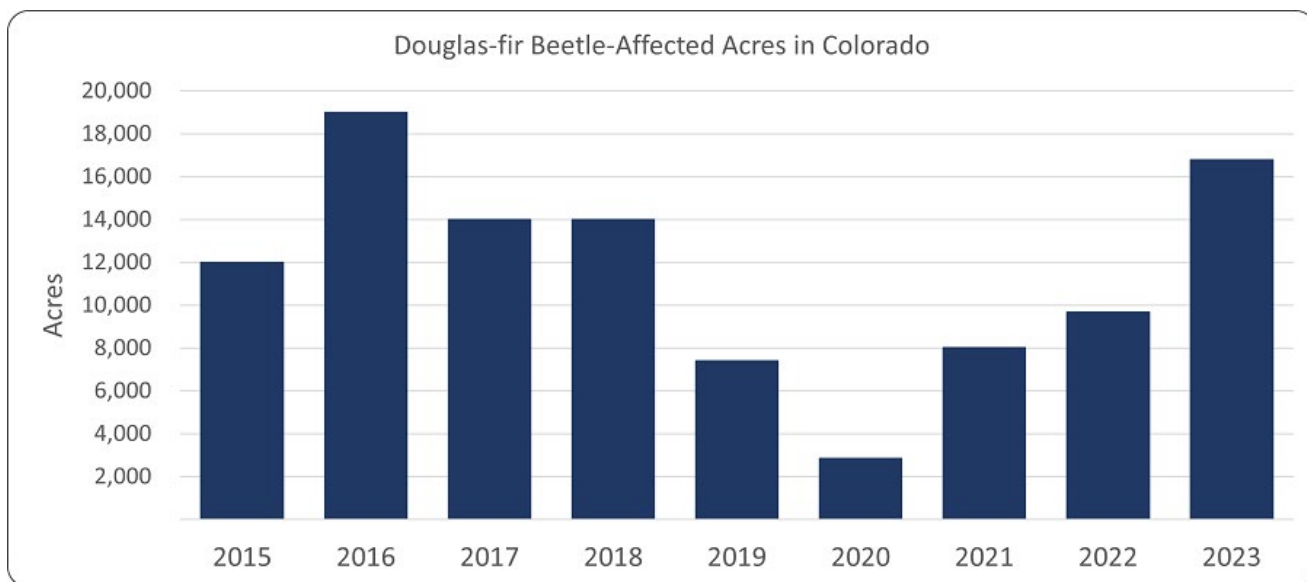
Douglas-fir beetle continues to impact more acres of forests in Colorado, reaching a level not seen since 2016. Graph: Dan West, CSFS

Notable Forest Pests in Colorado

Mountain Pine Beetle

Acres affected statewide in 2023: 3,100

Mountain pine beetle (*Dendroctonus ponderosae*) persists in pockets of pine trees in areas of Colorado. This native beetle is attacking mostly ponderosa pine, but also five-needle limber pines in the Mosquito Range. This beetle is active in Gilpin, Jefferson, Clear Creek, Elbert, El Paso, Park and Teller counties, with some areas seeing four times the impact in 2023 from the previous year. An active population of this beetle continues to kill lodgepole pines in the Taylor River drainage in Gunnison County.
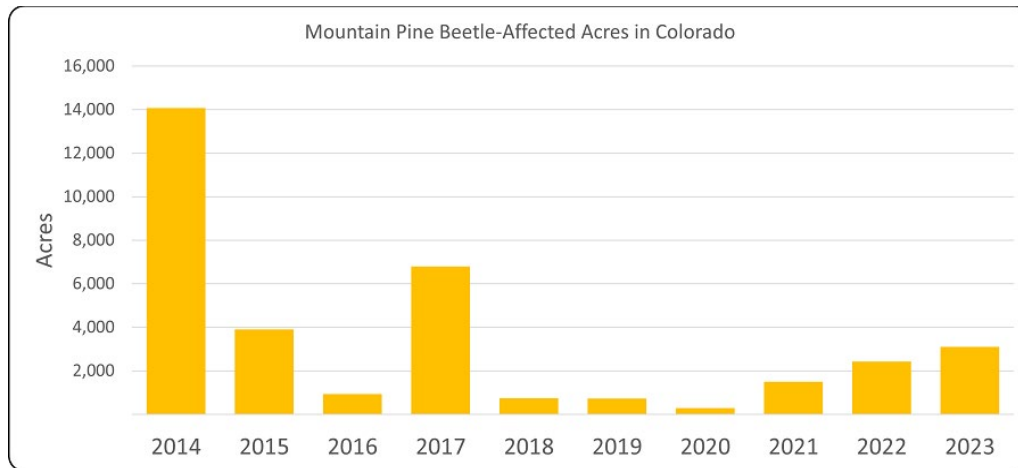
Mountain pine beetle continues to impact more acres in Colorado, although tree mortality from this insect is not even close to the levels experienced during the epidemic that subsided in 2014. Graph: Dan West, CSFS

Spruce Beetle

Acres affected statewide in 2023: 19,000

Spruce beetle (*Dendroctonus rufipennis*) was the deadliest forest pest in Colorado until 2022 and is in decline statewide. This beetle has depleted many of the largest, most susceptible spruce trees, although it continues to expand its footprint in high-elevation Engelmann spruce forests in Chaffee, Park, La Plata, San Juan and Costilla counties, while infestations in Grand County continue to decline.
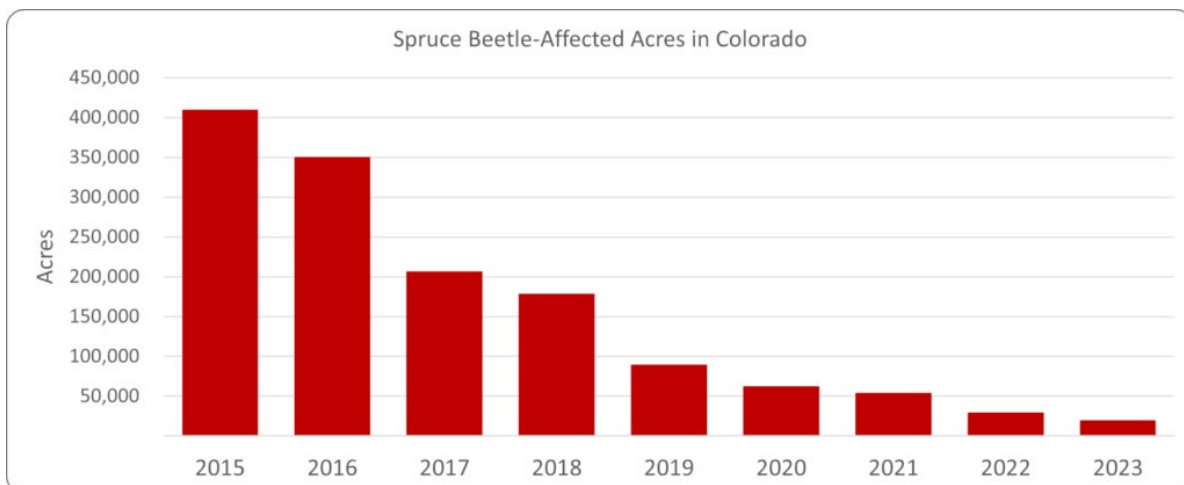
Spruce beetle remains in decline statewide in Colorado. Graph: Dan West, CSFS

Notable Forest Pests in Colorado

Piñon Ips Beetle

Acres affected statewide in 2023: 1,200

Piñon Ips beetle *(Ips confusus)* declined statewide in acres impacted, from 4,600 acres of forests in 2022 to 1,200 acres in 2023. Despite the decline statewide, prolonged drought continues to spur this beetle and it is killing new acres of lowland piñon-juniper forests, primarily in southwest Colorado. La Plata, San Miguel, Montrose and Mesa counties all still have significant infestations of this beetle, while other counties across the state experienced localized pockets of mortality, as has been the case in recent years with extensive precipitation and temperature fluctuations.

Roundheaded Pine Beetle Complex

Acres affected statewide in 2023: 5,280

Roundheaded pine beetle *(Dendroctonus adjunctus)* and associated native bark beetles (western pine beetle, mountain pine beetle, Mexican pine beetle and Ips engraver pine beetles) continue to increase their footprint of killed trees, attacking areas adjacent to infestations and previously uninfested stands. The bark beetle complex is killing groups of 5-10 or more trees within ponderosa pine forests in Dolores, Montrose and San Miguel counties. The intensity of beetle activity continues to remain high in localized areas of the San Juan National Forest and is moving into previously uninfested forests at a rapid pace. For the past three years, affected areas within San Miguel County, south of Norwood, are seeing pockets of tree mortality expand, more than doubling its scale across the county in 2023.
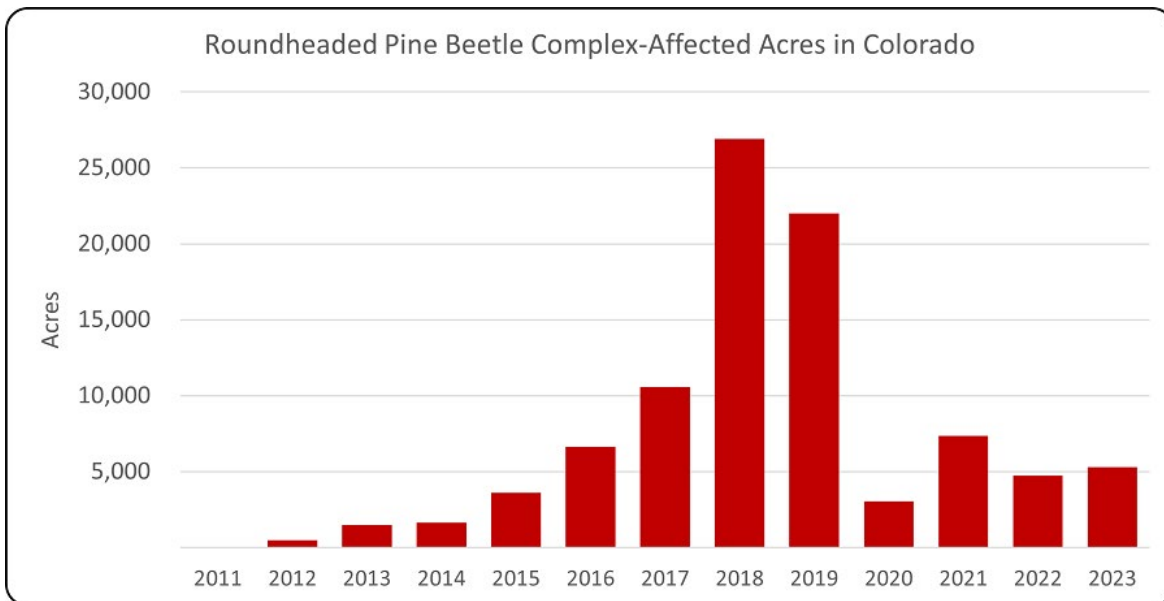
Roundheaded pine beetle and associated native bark beetles continue to impact forests in areas of southwest Colorado.
Graph: Dan West, CSFS

2023 Insect and Disease Activity in Colorado

Aerial Detection Survey - Colorado 2023 - All Major Pests
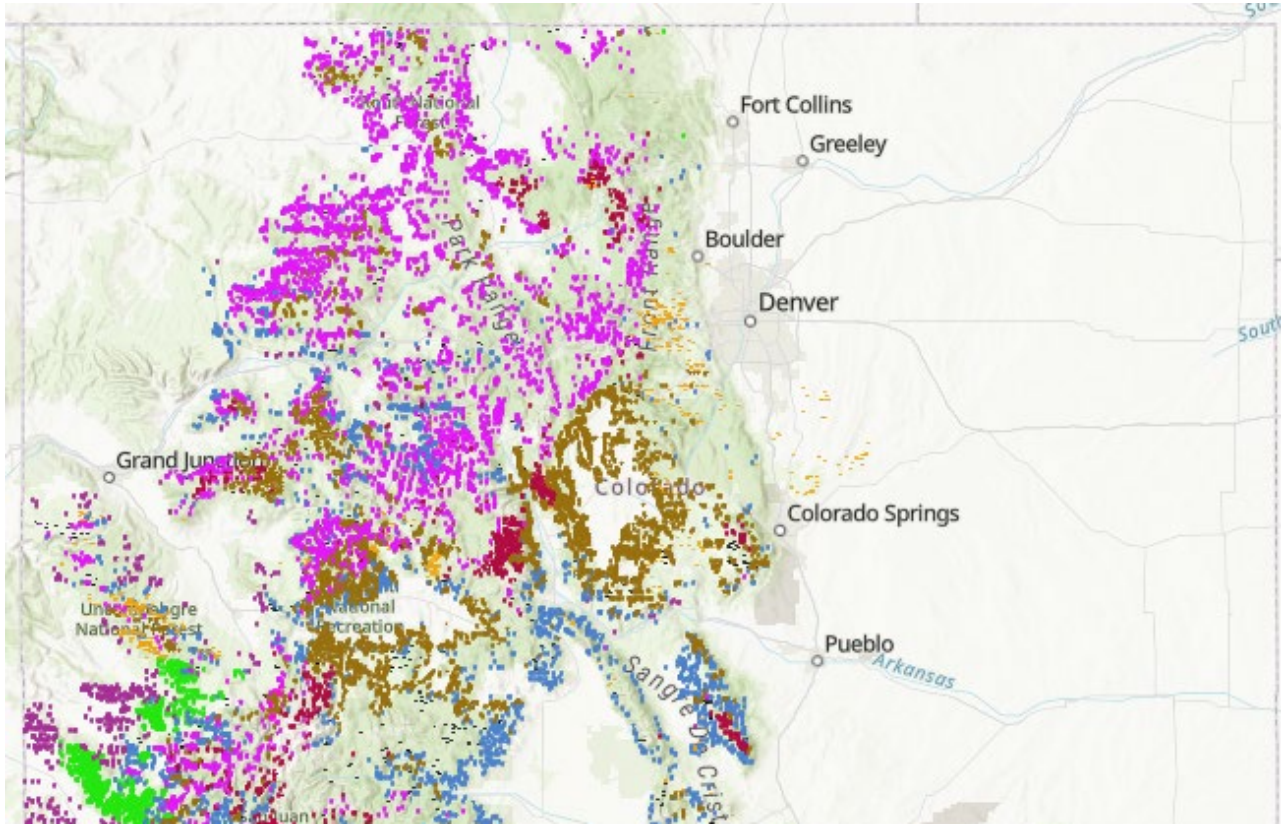
Resources

2023 Forest Health Highlights: Colorado

[2023 Forest Health Highlights: Colorado](#)

Forest Health Issues by Region of Colorado

[Northeast Colorado](#)
[Southeast Colorado](#)
[Southwest Colorado](#)
[Northwest Colorado](#)

Monitoring Forest Management

Lessons from Monitoring Inform Management Decisions for Our Future Forests

At the Colorado State Forest Service, we use data gathered through our monitoring program to support effective forest management practices. Monitoring provides a wealth of valuable information for how we can improve our management practices to support forest health into the future.

Monitoring involves observing and collecting data on our forests over time. This is a crucial part of a broader approach known as adaptive management, where we learn from our decisions to make more informed choices in the future.

A CSFS monitoring crew arranges a sampling plot on a Forest Restoration and Wildfire Risk Mitigation project site outside of Colorado Springs. Photo: Adam Smith, CSFS

Colorado's forests are diverse, so it's important that we learn how certain management decisions work in different situations. Through monitoring, we gather data on a range of variables, such as species composition, density, disturbances, climate conditions or topography, at sites where we or our partners manage Colorado's forests. By studying how management actions at these sites, such as thinning or reforestation, affect forests, we can be better prepared for an uncertain future.

CSFS Forest Monitoring Program

The CSFS has a long history of assessing forest health concerns and providing recommendations for future forest management. Our recently established monitoring program focuses on reviewing the effects of forest management treatments according to a landowner's desired goals and objectives, such as reducing wildfire risk. This helps us see how treatments affect forests and, over time, integrate this knowledge into practice to adapt and respond to new situations.

Not a bad view from the office! The CSFS monitoring crew often visits scenic locations across our beautiful state, such as a FRWRM-funded project site near Buena Vista. Photo: Adam Smith, CSFS

Each year, CSFS forest health and forest management monitoring crews travel throughout the state. They collect data related to forest management actions and forest health concerns, like insect and disease outbreaks. This information drives our evidence-based approach and helps us learn what works and how we can better achieve desired goals and objectives.

For example, we can help lessen the risk of an insect outbreak in individual stands by reducing tree density through forest management. Thinning the forest decreases competition for resources, such as sunlight and water, and increases the ability for the remaining trees to grow and thrive. In addition, we can place pheromone packets on trees to discourage insects from attacking them. Monitoring can help us understand the effectiveness of these treatments in reducing an insect outbreak, while also suggesting potential improvements to future treatments.

Monitoring Forest Management

Forest Conditions and Variables

Colorado's forests have variations in species type, elevation, topography, disturbances, land-use history, soils and climate. This diversity in our forests creates complex and unique situations for every area. Even in forests that seem similar, there can be unique differences that suggest a one-size-fits-all approach will not work.

For example, consider piñon-juniper forests – one of the largest forest types by acreage in Colorado. Within this broad classification, there are differences in the frequency and intensity of wildland fire within piñon-juniper forests that are related to the intrinsic features of individual stands. So, even while stands may share similarities, observing the ecological differences and responding with appropriate management actions presents challenges to land managers.
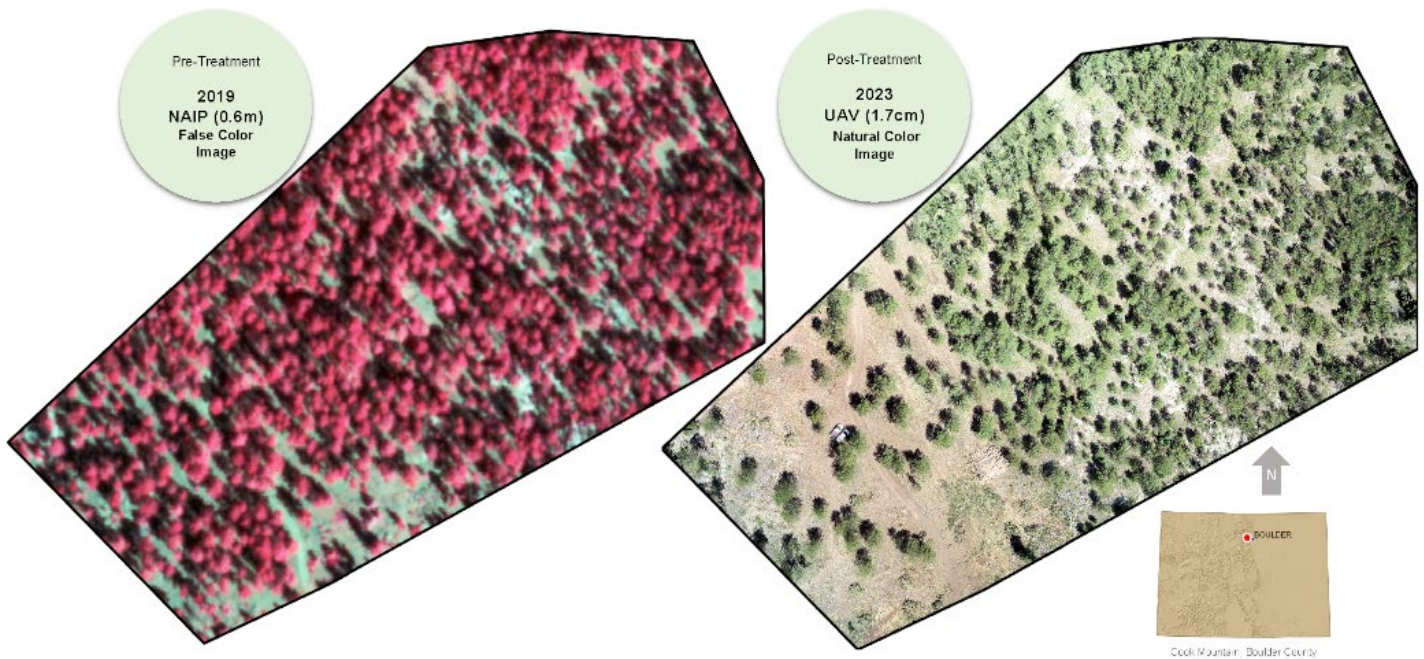
Not all monitoring happens on the ground. The CSFS uses imagery captured from drones to monitor the effects of management on a forest. This figure shows a project site in Boulder County before and after work has been conducted. The image on the left, from the USDA National Agricultural Imagery Program (NAIP), shows a near-infrared band that highlights vegetation and tree canopy (in red) before work took place at the site. The image on the right, taken by the CSFS via a drone, shows the site after treatment work has taken place. Graphic: Nic Kotlinski, CSFS

Similarly, ponderosa pine has traits that enable it to survive low and moderate severity fire. Lodgepole pine, while often appearing in areas with ponderosa pine, has traits that enable it to regenerate after higher severity wildfire. It's important to address traits like these when managing overlapping areas and developing management actions that address a landowner's goals and objectives.

The specific conditions of individual project sites determine the appropriate management objectives. For instance, a watershed protection project may require a different approach than a forest restoration project. Monitoring offers critical information on these variables. When paired with information from prior projects, this helps achieve the best result for project objectives with similar conditions.

Monitoring is an essential process in relation to climate change and its effects on forest disturbances, such as insects and disease or wildfire. The effects of climate change are complex, and models of future potential climatic conditions change as we observe new trends in data. This emphasizes the importance of monitoring real-world scenarios to enhance how we approach these challenges.

Monitoring Forest Management

Forest Restoration & Wildfire Risk Mitigation

Every day, insights we gather through our monitoring program inform how we manage Colorado's forests and help landowners achieve their goals. Take, for example, the Forest Restoration & Wildfire Risk Mitigation (FRWRM) grant program, which supports community efforts for wildfire risk reduction, forest health and restoration at the local level.

With FRWRM-funded projects, the CSFS works with private landowners and grantees to understand forest conditions before taking management action. Insights gleaned from our monitoring program help guide the best course of action to meet the grantee's objectives, which is particularly important when protecting residential areas from wildfire in the wildland-urban interface. By monitoring active FRWRM-funded projects and using insights to inform future projects, we adapt our management statewide to better protect homes and properties from wildfire while improving forest health.

As forest management projects move forward, monitoring and collecting data allow the CSFS and other land managers to determine what's working and what lessons can be learned. This guidance is beneficial to all levels of forestry professionals. Over time, this process advances adaptive management practices to promote future healthy forests in Colorado for all of us.

Good Neighbor Authority

GNA Program Extends Critical Forest Management Across Boundaries

The past two decades show undeniable warning signs that Colorado's forests are becoming breeding grounds for uncharacteristically large wildfires. The state's 20 largest wildfires have all occurred since 2002. Infestations of bark beetles and other insects and diseases have created panoramas of brown and gray dead trees in dense, overgrown forests.

The Poncha Pass fuels mitigation project spans Bureau of Land Management and private lands in Saguache and Chaffee counties along U.S. Hwy. 285. This photo shows BLM campground land on the south side of Poncha Pass after work on the Good Neighbor Authority project was completed. Photo: Amy Bulger, CSFS

Good Neighbor Authority

GNA Program Extends Critical Forest Management Across Boundaries

Looking for solutions, the U.S. Forest Service started a pilot program with the Colorado State Forest Service in 2000 to flesh out a new idea for forest management – one with partnership eclipsing land boundaries. This experiment has turned into a movement across the country with an extended pilot program leading to permanent expansion in the 2014 U.S. Department of Agriculture Farm Bill. The bill also now includes the Bureau of Land Management, counties and tribes as partners that can work on Good Neighbor Authority (GNA) projects, along with state forestry agencies like the CSFS, to complete critical restoration services such as forest management projects on federal lands.

The GNA program has been used across 38 states, according to the National Association of State Foresters. It provides efficiencies and benefits including pooling federal, state, tribal and county resources, strengthening partnerships, fostering collaboration and conducting larger scale, cross-boundary projects.

"Increasing the pace and scale of forestry work across lands that are managed by different agencies is difficult if each entity is trying to do their own thing," Diana Selby, manager of program delivery for the CSFS, explained. "Each agency only has so much capacity, and the resources required to get large projects done are not always there, so if we can partner, we can get more done. GNA helps in that regard."

The Good Neighbor Authority program has been used across the 38 states colored dark green in this map. Map: Brian Sathe, CSFS. Data: National Association of State Foresters

What's good for Colorado's forests is also good for residents. The GNA program lets the CSFS manage and administer landscape-scale projects across federal, state and private lands. Coupled with the CSFS' longstanding history of working cooperatively with state, tribal and private landowners, GNA paves the way to funding more projects that reduce wildfire risk, particularly for residents living in the wildland-urban interface.

"We're not looking at one little piece of forest management anymore. Everyone's on board and we're working together to get it done," Selby said.

A tally in November 2023 by the Council of Western State Foresters cited 149 active GNA projects with the U.S. Forest Service and 17 with the BLM across 13 western states. In Colorado alone, GNA agreements have helped the CSFS and federal partners treat almost 9,500 football fields worth of forestland (over 12,000 acres) in the past decade.

GNA in Colorado

🌲 **12,437+** acres treated (completed or under contract)

🌲 **887** acres of wildfire mitigation and fuels reduction projects

🌲 **68** timber sales

🌲 **$1.165M** in revenue from timber sales (in millions)

Good Neighbor Authority

Why GNA Works

The country's historic desire for fire suppression has contributed to a landscape of crowded, unhealthy forests. With fewer natural fires, overgrown forests became buffets for insects and disease infestations and tinderboxes of dead timber that usher in the types of uncharacteristically large wildfires seen across Colorado in 2020. Cooperative thinking and the ability to work across fences are critical tools gaining a foothold for forest management in this landscape.

Through GNA, federal partners bring funding and resources; the CSFS offers forestry services, labor and state contracting methods, which streamlines the bidding process for timber contractors.

Part of the Wolf Creek Good Neighbor Authority project included stacking log decks at the Wolf Creek Pass Ski Area in southwest Colorado, where they will be hauled away by timber contractors. Photo: Adam Moore, CSFS

"We recognize that treatments need to be cross-boundary," Selby said. "When the CSFS can manage projects like these, it makes it more cost effective. We see more activity from contractors bidding on jobs since it's much easier for them to place bids for a whole project. Without GNA, they would have to bid separately on federal and state and private parcels within one project area."

The GNA program has helped improve relationships between federal and state partners, said Selby, who began her CSFS career 19 years ago as a forester. She started supervising the GNA program for the CSFS in 2018.

"We've always communicated with other agencies. But now we're having regular conversations to talk about our priorities and their priorities and how we can align," she said.

Since Colorado's first GNA project in 2015 — an aerial spraying to halt Douglas-fir tussock moth spreading in the Pike-San Isabel National Forest — the CSFS has been able to complete more forest health projects with funding and resources that aren't available outside the GNA framework. As of early 2024, the CSFS has around 30 active and planned projects and 48 staff dedicating at least part of their time to GNA work.

Federal partners are also drawing on the benefits of partnership. What the CSFS offers in forestry knowledge is just what some federal partners are seeking. When Scott Nilson, a fire management specialist for the BLM Rocky Mountain District, was looking to reduce wildfire risk around popular recreation areas along Poncha Pass near Salida, he knew CSFS foresters would be an asset.

"Although over my career I've been involved in a lot of forestry practices, I'm not a forester," Nilson said. "So that's when we talked about trying to link up with the Colorado State Forest Service to provide the forestry expertise and general forestry services to help get this project off the ground."

Good Neighbor Authority

Meeting Colorado's Needs

The Good Neighbor Authority authorizes many types of forest health projects, loosely defined to include activities that reduce wildfire risk, protect watersheds and water supplies, and meet other forest management objectives set by the U.S. Forest Service and BLM.

"For the CSFS, GNA work means primarily fuels mitigation, timber sales and planning efforts throughout the state," Selby said. "But there's a lot of flexibility to do whatever the [U.S.] Forest Service or BLM is interested in."

The CSFS Timber Strike Team is a group of foresters and interns who scour project areas before work begins. The Strike Team was in Cherokee Park in the northern Front Range in August to mark trees for removal and conduct a forest inventory assessment. Photo: Field Peterson, CSFS

The CSFS has helped with a variety of GNA work, from growing seedlings at the CSFS Nursery for restoration projects, to setting up a Timber Strike Team of interns to conduct forest inventories in northern Colorado. In northwest Colorado, CSFS Lead Forester Carolina Manriquez is working with the U.S. Forest Service on the North Routt GNA project to reduce wildfire fuels near Steamboat Lake.

"GNA has been huge for us," she said. "We have strong partners who are interested in figuring out how we get this work done together. It's been positive because we have these critical partners on the federal side to address what our community has wanted to address for a long time."

Federal Funds Create Local Jobs

Across the West, timber sales can be drivers for GNA program sustainability, largely because states get to keep revenue generated from GNA timber sales. Frequently, those profits are rolled back into the GNA program to expand a project or invest in more staffing.

Some states – like Idaho, Oregon and Washington, where climate helps trees grow prolifically – have generated more than $10 million each in revenue from such sales. Colorado, with a harsher climate and forests ravaged by insects and disease, has amassed a little over $1.1 million in revenue, which has been rolled back into the state's GNA program.

"Here in Colorado we don't have high-value timber on the landscape like in other places," Selby said. "Here, timber sales are not going to carry the GNA program. It still takes support from the state and federal partners to keep it maintained at the level we're at now."

Last year saw an influx of funding for GNA across the country, allowing the U.S. Forest Service to invest more than $20 million. The program's first funding was $200 million, appropriated as part of the initial Bipartisan Infrastructure Law agreements for GNA projects from 2022-2026; $160 million went to the U.S. Forest Service and $40 million to BLM.

Good Neighbor Authority

Federal Funds Create Local Jobs

Those initial BLM funds directly impacted Colorado forests and local jobs on the Poncha Pass project near Salida, which employed multiple Colorado contractors to cut and haul timber to a local mill. Nilson, the BLM fire specialist, recognized how federal funding, combined with the CSFS partnership, sent a positive ripple through the community.

"By injecting some of those federal monies over to the state forest service to implement contracts for us, they [CSFS] were able to work with local vendors in a way that, essentially, we were taking some of that federal Bipartisan Infrastructure Law money and getting it out to local vendors treating local lands – which is really special," he said.

GNA Funding Across the Country

An idea borne within the U.S. Forest Service and officially enacted as part of the 2014 Farm Bill, the Good Neighbor Authority program has seen two major expansions since it began. The program was bolstered soon after it began to allow additional tribal and county agencies to work with the U.S. Forest Service and the Bureau of Land Management on projects that improve forest health, lower wildfire risk and protect watersheds.

One of the first large nationwide investments into the GNA program was through the 2021 Bipartisan Infrastructure Law, appropriating $200 million to GNA agreements for 2022-2026, $160 million to the U.S. Forest Service and $40 million to BLM.

In 2023, further Bipartisan Infrastructure Law funding helped the U.S. Forest Service invest more than $20 million into GNA to "fund projects and leverage state resources across 18 states to protect communities, improve forest health, reduce invasive plants and improve watersheds, while creating job opportunities for state crews in rural areas," a U.S. Forest Service press release states.