



Mean, green tree-eating machine



Photo: Pennsylvania Department of Conservation and Natural Resources - Forestry, Bugwood.org

Not if, but when: Destructive beetle destined for City

Walking along 30th Street in Boulder on a sultry day last August, a tour group of city employees from throughout Northern Colorado, including seven from Loveland, found themselves in what looked like a mid-winter landscape.

Forty-foot-tall ash trees growing in a strip separating street and sidewalk were bare. Spreading limbs and branches that should have provided a shady canopy near the Williams Village dormitory complex southeast of Colorado University's campus were instead losing their bark.

The emerald ash borer, a tiny

metallic-green beetle that first landed in Boulder three years earlier, was chewing its way through Boulder's ash trees at an astonishing rate. Boulder Parks Department Forester Kathleen Alexander conducted the tour and chose 30th Street to show her visitors what was in store for them.

"Two summers ago, these all had the appearance of healthy trees," she said. "They weren't, as we know today." The beetle larvae were at work then. What members of the tour group saw was the result of years' worth of their efforts.

Taking wing

"When" is the word that experts use in describing the course of the emerald ash borer's infestation in Front Range cities. None of them uses "if" anymore.

While the beetle has not yet

surfaced in Loveland, Longmont trees are under attack. The beetle's winged journey is slowly but steadily taking it southeast toward metro-Denver and northeast, with Loveland, Windsor, Fort Collins and Greeley in its inevitable path.

"This is a very slow-moving natural disaster," said Whitney Cranshaw, a Colorado State University entomologist who is among the nation's most visible authorities on the emerald ash borer. "Within our generation, nearly all varieties of ash trees in North America will be gone."

The ash borer – or EAB, as it is now widely known – is an immigrant from northern China. It made its U.S. debut in Detroit in 2002, likely hitching a trans-Pacific ride on a freighter, and made its way to Colorado most likely in a

(see **EAB** page 2)

EAB (from page 1)

load of firewood brought in from the east.

EAB's arrival in Loveland has major implications for home and property owners, and for a City organization that has assembled an interdepartmental team to plan for it. The task list is a long one. For starters, it includes:

- Taking an accurate inventory of Loveland's ash trees located in parks, golf courses, natural areas and other public lands, and City-owned street trees, then estimate the number on private property.
- Deciding which trees should go now, ahead of the invasion, and which ones might be candidates for expensive, long-term treatments once the beetle arrives.
- Planning for ways to deal with huge volumes of trunks, limbs and branches that would comply with a strictly enforced quarantine on movement of debris.
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- Informing residents of ways to identify their trees, evaluate available treatment choices and steps to deal with the consequences of the ash borer's destructive invasion.
- Preparing for safety hazards presented by trees that will become dry, brittle and unstable as they succumb to the ash borer.
- Collaborating with private tree service operators who will make up a mechanized army to respond once trees begin to fail.

Hatching a plan

Parks and Recreation

Department Director Elizabeth Anderson joined Public Works Director Leah Browder on Feb. 7 in presenting to the Loveland City

Council elements of a draft EAB response plan. They sought and received an appropriation of \$92,200 to start the work of removing the least healthy, most vulnerable City-owned ash trees and replacing them with other species.

Not being first on the EAB target list has advantages. Lessons learned in Boulder are the basis for parts of the response plans in other communities. Boulder, likewise, applied the knowledge gained from Midwestern states decimated by the beetle prior to Colorado's outbreak.

Loveland has already completed part of an inventory of the City's ash trees, counting 810 in City parks alone. The count is continuing on golf courses and in natural areas. The City estimates it owns about 15,000 street trees, about 3,450 identified as ash.

10x multiplier

Experience in other communities shows that the number of ash trees on private property could be 10 times the number on public land. If Loveland has nearly as many ash trees as people, as the estimates suggest, their loss will alter our landscape in ways that a trip to neighborhoods in southeast Boulder will illustrate.

Because the trees' limbs spread outward, the loss of their shade makes the problem even worse. While ash accounts for just 23 percent of the City's street trees, the canopy loss would be 46 percent.

Council-approved funds allow



A tour group guided by Boulder City Forester Kathleen Alexander ponders the winter-like scene on 30th Street during an August expedition to view the emerald ash borer's devastation.

the City to take the initial steps of removing at-risk trees, replacing them and preparing to treat with injectable pesticides the most desirable trees, including some in the high concentration of ash in Loveland Burial Park.

Loveland's response plan lays out a scenario that will call for a long-term public expense. Boulder's projections call for \$230,000 in spending this year and next, then \$500,000 annually for the following four years through 2022.

Costs Loveland faces could be lower, with fewer ash trees in its urban forest. Whatever the burden may be, preparation and planning will help to reduce it, EAB veterans say.

"You have the time to plan," Boulder forester Alexander said. "But you should plan with the knowledge that it may already be in Loveland, and just hasn't been found yet. EAB is always ahead of where you think it is."

EAB Questions, answers

The Colorado State Forest Service has provided a comprehensive website that answers many questions that residents and property owners have. Find it at:

• www.EABcolorado.com

The City will launch its own website at:

• CityofLoveland.org/EAB

By the time you read this edition of City Update, the page will be available and will continue to build over the years that Loveland will be facing the problem.

Two or more of these symptoms could indicate an EAB infestation

Confirm it's an Ash

A homeowner's first step in the battle against EAB is to confirm that they have Ash trees.

Ash trees are distinctive in two ways; branches on Ash trees grow in pairs that oppose one another, and the leaves grow in compound clusters with five to 11 leaflets each (see below).



Paul Wray, Iowa State University

Signs of infestation

The visual signs of an EAB infestation are common to other kinds of Ash tree infestations.

Because of that, tree owners should look for two or more of the following symptoms when trying to determine the presence of EAB.

Canopy dieback

The dieback of the upper and outer sections of a tree can indicate an infestation that may be a few years old.

As EAB larvae feed on the tree, its ability to send nutrients and water to its outlying branches diminishes and branches die.



Steven Katovich, USDA Forest Service

Serpentine galleries

Larvae under the bark wind back and forth as they feed on the wood of the tree. They leave a serpentine pattern behind, which widens as the larvae grow.



James W. Smith, USDA APHIS PPQ

D-shaped exit holes

Fully mature adult insects that emerge from behind the bark of a tree leave distinctive D-shaped holes behind. The holes measure about 1/8 of an inch in diameter.



William M. Ciesla, Forest Health Management, Inc.

Increased woodpecker activity

Large numbers of EAB larvae can attract woodpeckers who tend to feed high in the tree where the insects initially take up residence.

The additional damage inflicted by the woodpecker can leave a tree that much more vulnerable to infestation.



Colorado State University Extension

April is Fair Housing Month

To discuss a fair housing complaint or possible housing discrimination, call the City's Community Partnership Office at 962-2517.



Special election for Ward III set for April 11

The City of Loveland will hold a special election April 11 to fill the Ward III vacancy created when former City Councilman Hugh McKean won election to the Colorado House of Representatives.

McKean's term with the City of Loveland was not due to expire until November 2017.



Ballots will be mailed to registered voters who reside in Ward III beginning March 20.

Registered voters in Ward III can also pick up ballots at the Loveland City Clerks office at 500 E. Third St., Suite 230.

Residents who need to register to vote can do so online at larimer.org/elections/registration.htm.

For more information or to get an absentee ballot, contact the City Clerks office at 962-2717, or go to cityoflovleand.org/specialelection.



SMART IRRIGATION CONTROLLERS

Looking for an easy solution to save water and improve your landscape this spring? Consider installing a smart irrigation controller. Smart irrigation controllers use environmental information such as weather or soil moisture to adjust run time and frequency of irrigation.

Smart controllers help prevent over watering of the landscape, which wastes water. This may also lower water related expenses on homeowners' utility bills. Installing a smart controller can make your landscaping look beautiful while making it convenient and easy to irrigate. There are many types of smart irrigation controllers. Each type of device uses different environmental information to adjust the watering schedule.

Weather based controllers, also referred to as climate-based controllers or smart controllers, use site-specific information to monitor changing weather patterns to prevent unnecessary watering. These controllers calculate evapotranspiration (ET). ET is the combination of evaporation and plant transpiration. Using sensors, the device measures the amount of water that evaporates from the soil's surface or that used by the plants. This type of device will also monitor local weather conditions using a weather sensor or weather data from the Internet or a local weather station. Using this information, these controllers adjust the irrigation schedule to meet the current need.

Soil moisture-based controllers use a probe that is installed in the turf and measures moisture at the root. The system compares this data to the recommended moisture level of the plant and soil type. If the ground is moist, the soil moisture controllers shut off the irrigation system, preventing over watering. If the system detects that the soil is dry, it allows the sprinkler system to

operate as programmed. Soil moisture sensors must be carefully installed in a representative area of the turf.

Rain sensors, also referred to as rain switches, can temporarily shut off irrigation systems when it's raining. Some models detect current water levels using probes and others use an absorbent disk. When the device measures a certain threshold of water it triggers the irrigation system to turn off. If the device measures dry conditions it allows the irrigation system to operate normally.

Most types of irrigation controllers can be retrofitted on a new or existing irrigation system. To get more information about smart irrigation controllers visit your local hardware store and start saving water and improving your landscape today!

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cityofloveland.org/LWP



**COLORADO WATER
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TIPS TO CONSERVE WATER OUTDOORS

1 DON'T RUN OFF

Only apply as much water as the soil can absorb. Use the Cycle and Soak method—break watering times into 3 short cycles, allowing an hour of soak time in between.

2 PROGRAM YOUR SPRINKLER

By programming your automatic sprinkler system to fit the weather conditions, you water when the plants need it, not by the clock.

3 RIGHT TIME YOUR WATERING

Water during the cooler hours and avoid sprinkling on windy days.

4 BE WEATHER SMART

If it has rained in the past few days, or will rain soon, don't water.

5 PLANT THE RIGHT PLANTS

Choose Plant Select® and X-rated plants that thrive in Rocky Mountain gardens.

6 DON'T WATER THE SIDEWALK

Don't water the sidewalk, rocks or road. They won't grow.

7 AERATE

Aerate in the spring or fall to open up soil to absorb more moisture.

8 SWEEP

Don't waste water by spraying off a driveway or sidewalk, use a broom instead.

9 INSTALL SMART SPRINKLERS

Use efficient technology like drip irrigation, rotary spray nozzles, and smart irrigation controllers.

10 CHECK FOR LEAKS

Check sprinkler systems and timing devices to be sure they are operating properly.

11 RAISE YOUR BLADE

Cut grass at least three inches in height to encourage deeper roots and better moisture retention. Never cut more than 1/3 of the grass blade.

12 AVOID OVER-FERTILIZING

The application of fertilizers increases the need for water. Apply fertilizers that contain slow-release, water-insoluble forms of nitrogen.

13 MULCH

Mulch to retain moisture in the soil. Mulching also helps to control weeds that compete with plants for water.

14 XERISCAPE

Xeriscape is based on a combination of seven common sense principles to save water while creating lush, beautiful landscapes.

Brought to you by ColoradoWaterWise.org



If you are a Loveland Water and Power customer, a free home efficiency assessment with water and energy saving upgrades is available to you.

**SAVE MONEY
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& ENERGY
AT HOME**

The Larimer County Conservation Corps has partnered with Loveland Water and Power to offer services and products to improve your home's efficiency at no cost to you. This limited time offer is available now through April.

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(970) 498-6081 or visit larimerworkforce.org/energy



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CONSERVATION
CORPS**



TAKE
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TODAY!

FIRE HYDRANT FLUSHING BEGINS APRIL 10, 2017 Hydrant flushing helps keep the interior of the pipes clean, helps maintain excellent water quality, and ensures hydrants are operating properly.

Flushing can cause brief water discoloration. Although it is not recommended to use for laundry due to possible staining of clothes, the water is still drinkable.



2017 FLUSHING SCHEDULE

**QUESTIONS?
CALL 970.962.3720**

*Flushing will start
on the west side
of Loveland and
work eastward.*

**APRIL 10-14
NORTHWEST
SECTION**

north of Hwy. 34
and west of
Colorado Ave.

**APRIL 17-21
SOUTHWEST
SECTION**

south of Hwy. 34
and west of
Colorado Ave.

**APRIL 24-28
NORTHEAST
SECTION**

north of Hwy. 34
and east of
Colorado Ave.

**MAY 1-5
SOUTHEAST
SECTION**

south of Hwy. 34
and east of
Colorado Ave.
(includes downtown)

**MAY 8-12
EAST
SECTION**

Denver Ave.
east to Centerra