

# Elm Zigzag Sawfly

## Scouting Guide

### What is elm zigzag sawfly?

Elm zigzag sawfly (EZS) is an invasive insect that feeds on elm leaves. Native to Asia, it was first detected in North America in 2020. Over the next five years, EZS was found in 14 states in the U.S., including North Carolina. EZS can strip mature elms of their leaves, causing stress and branch dieback. As a recent invader, the full impact of this insect in North Carolina is uncertain.



An adult EZS on an elm leaf,  
Photo Source: Delaney Serpan,  
NC State University



Zigzags left behind by EZS larval  
feeding, Photo Source: Delaney  
Serpan, NC State University



EZS larvae, Photo Source: Delaney  
Serpan, NC State University

### What to look for:

- Zigzag feeding damage starting at the edge of the leaf and moving inwards
- Bright green larvae with black markings on the head and legs
- Small (~¼ inch), black adults with pale yellow legs and smoky black wings

### When and where to look:

EZS is active from April to September. To date, EZS has only been observed feeding on elms, but its entire host range is unknown. To identify some of the native elms in North Carolina, look for a leaf with an asymmetrical base and doubly serrated edges. During spring, elm trees produce a distinctive winged fruit, called a samara. The fruit is round, with a papery ring surrounding the seed. Native elm trees have rough bark with tall ridges.

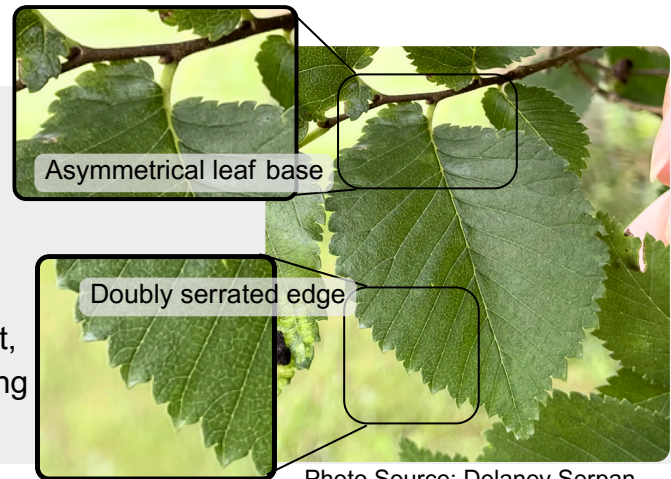


Photo Source: Delaney Serpan,  
NC State University

### What to do if you find EZS:

- If you find EZS or its damage: report it to your NC Forest Service County Ranger or directly to researchers at NC State using the QR code
- To protect your trees: find management recommendations at NC State Extension Forestry.



Find your NC Forest Service County Ranger here: <https://www.ncagr.gov/divisions/nc-forest-service/contacts>

For more information about EZS, including management recommendations: <https://content.ces.ncsu.edu/elm-zigzag-sawfly>

For current range information: [https://forestry.ces.ncsu.edu/wp-content/uploads/2025/05/20250513\\_ElmZigzagSawfly\\_US-2.pdf?fw=no](https://forestry.ces.ncsu.edu/wp-content/uploads/2025/05/20250513_ElmZigzagSawfly_US-2.pdf?fw=no)

To find your county's NC State Extension Agent: <https://www.ces.ncsu.edu/directory/>