



NCDA&CS

Plant Industry Division Plant Protection Section

PEST WATCH

Asian Longhorned Beetle

Anoplophora glabripennis (Motschulsky, 1853)
(Coleoptera: Cerambycidae)



The Asian longhorned beetle (*Anoplophora glabripennis*; ALB) is native to Asia and was first detected in the United States in 1996 in Brooklyn, NY. This invasive insect has since been found in other parts of New York, Illinois, Massachusetts, New Jersey, Ohio, and South Carolina. **This pest is not known to occur in North Carolina but early detection is critical for protecting North Carolina agriculture, businesses, and forests.**



a) Adult ALB (Photo by Kenneth Law, USDA-APHIS-PPQ, Bugwood.org); b) ALB larva tunneling in branch (Photo by Larry Barber, USDA-Forest Service, Bugwood.org) and inset shows frass build-up caused by larvae tunneling under bark (Photo by Kenneth Law, USDA-APHIS-PPQ, Bugwood.org); c) Egg niches where a female ALB has chewed the bark to create a pit to deposit an egg (Photo by Joe Boggs, Ohio State University); d) ALB exit hole (roughly 3/8"); Photo by Dennis Haugen, USDA Forest Service, Bugwood.org); inset image shows pencil in exit hole for size reference and to differentiate from carpenter bee activity [ALB tunnels straight through wood and carpenter bee goes in and down] (Photo by Joe Boggs, Ohio State University, Bugwood.org); e) Beginnings of tree dieback caused by ALB infestation (Photo from Pennsylvania Department of Conservation and Natural Resources, Bugwood.org)

HOSTS:

This insect is a known pest of many species of hardwood trees. Preferred hosts include *Acer* (maple, boxelder), *Aesculus* (horsechestnut, buckeye), *Betula* (birch), *Salix* (willow), and *Ulmus* (elm). Less common hosts include *Albizia* (mimosa), *Fraxinus* (ash), and *Populus* (poplar).

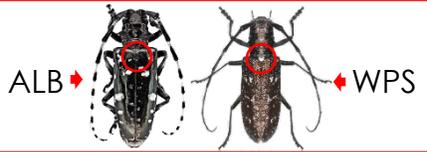
IDENTIFICATION:

Adults of Asian longhorned beetle are about an inch long and are black with irregular white spots along their backs. Their antennae are quite long (typically longer than their bodies) and have alternating black and white segments. Commonly mistaken for a native insect, whitespotted pine sawyer (WPS).

SIGNS AND SYMPTOMS:

Perfectly round exit holes in hardwood trees are a key sign of ALB infestation. Other signs include presence of many small wounds with chew marks around the edges on the bark of trees known as egg niches where a female will lay her eggs (image 'c') above). As the larvae tunnel and feed under the bark a build-up of frass (looks like sawdust) may appear. Evidence of tunneling in cut or broken branches is also common. Other signs include weeping sap, early leaf color change and drop, and branches dropping or dying.

How do you know if you're looking at ALB versus WPS? The native whitespotted pine sawyer has a white spot at the base of its wings while the invasive Asian longhorned beetle does not (this feature circled in red)



WHAT TO DO:

Collect a specimen: If you suspect you have found Asian longhorned beetle please collect a specimen and report it to newpest@ncagr.gov. We will assist you with specimen submission.

Take a picture: If you aren't sure if what you're looking at is ALB you can submit a photograph to newpest@ncagr.gov or contact your local plant pest specialist (see contact information on back).

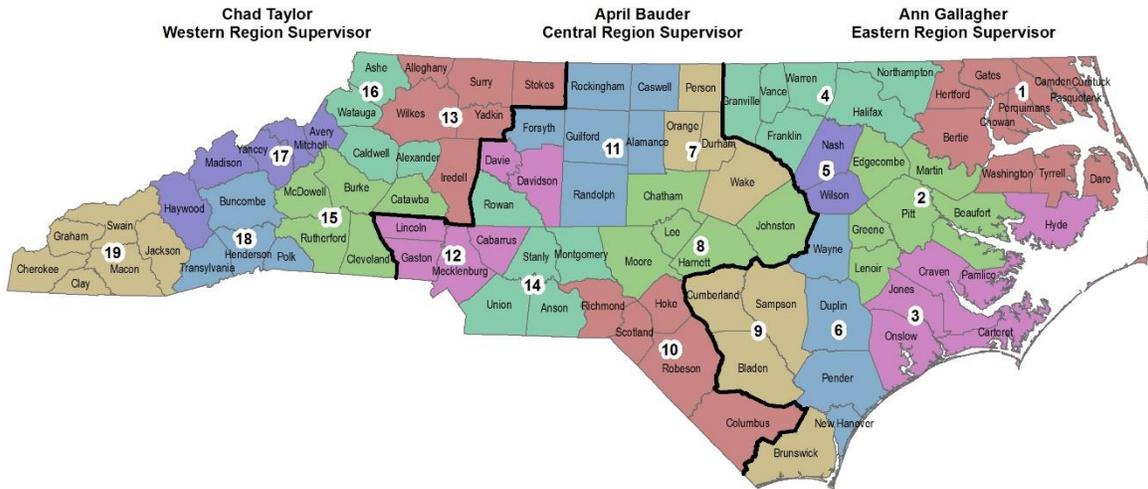
Report a find: When reporting a potential find to newpest@ncagr.gov please include the location & date of the find and a size reference (e.g. a quarter) when submitting a photo.

Please note: This pest is most commonly moved in solid wood packing material and in infested materials such as logs and firewood. **Do not move firewood** and remember to buy it where you burn it to help prevent the spread of invasive pests.

Steve Troxler, Commissioner of Agriculture
Phil Wilson, Plant Industry Division Director
NC Department of Agriculture & Consumer Services

For up to date information please visit:
www.ncagr.gov/plantindustry

NC Department of Agriculture & Consumer Services
Plant Industry Division – Plant Protection Section
Plant Pest Specialist Work Areas



Specialist's Names, Contact Information and Assigned Areas

Area 1:	Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Pasquotank, Perquimans, Tyrrell, Washington	Joe Davenport	(919) 608-0635
Area 2:	Beaufort, Edgecombe, Greene, Lenoir, Martin, Pitt	Bonnie Faulkner	(252) 521-3180
Area 3:	Carteret, Craven, Hyde, Jones, Onslow, Pamlico	David Pearce	(252) 670-1742
Area 4:	Franklin, Granville, Halifax, Northampton, Vance, Warren	Derreck Long	(252) 567-1247
Area 5:	Nash, Wilson	Ann Gallagher	(919) 218-1765
Area 6:	Duplin, New Hanover, Pender, Wayne	Scott Cannady	(919) 270-4910
Area 7:	Durham, Orange, Person, Wake	April Bauder	(919) 777-3251
Area 8:	Chatham, Harnett, Johnston, Lee, Moore	Jensen McLamb	(910) 638-4943
Area 9:	Bladen, Brunswick, Cumberland, Sampson	Chris Carter	(919) 218-8654
Area 10:	Columbus, Hoke, Richmond, Robeson, Scotland	Michelle Shooter	(910) 734-3477
Area 11:	Alamance, Caswell, Forsyth, Guilford, Randolph, Rockingham	Andrew Allen	(336) 404-5873
Area 12:	Cabarrus, Davidson, Davie, Gaston, Mecklenburg, Lincoln	Heidi Humlicek	(406) 750-6432
Area 13:	Alleghany, Iredell, Stokes, Surry, Wilkes, Yadkin	Ginger Hemmings	(336) 314-9334
Area 14:	Anson, Montgomery, Rowan, Stanly, Union	Samuel Harris	(919) 604-3896
Area 15:	Burke, Catawba, Cleveland, McDowell, Rutherford	Amanda Cook	(828) 443-1289
Area 16:	Alexander, Ashe, Caldwell, Watauga	Chad Taylor	(336) 466-0478
Area 17:	Avery, Madison, Mitchell, Yancey	Tim Hartley	(828) 260-0588
Area 18:	Buncombe, Henderson, Polk, Transylvania	Sue Dial	(828) 577-0915
Area 19:	Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain	Ryan Holquist	(828) 421-5445

Mailing Address: 1060 Mail Service Center, Raleigh NC 27699-1060
Physical Address: 216 West Jones Street, Raleigh NC 27603
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Please visit our website at www.ncagr.gov/plantindustry for more information!