

# Esopus Creek News

Ashokan Watershed Stream Management Program Newsletter

A quarterly publication of Cornell Cooperative Extension Ulster County

Broadstreet Hollow - Woodland Valley - Stony Clove - Fox Hollow - Birch - Beaverville - Little Beaverville - Peck - Bushnellville - Bush Kill

## Announcing the Catskill Streams Buffer Initiative

Got streamside vegetation? If your streamside area consists entirely of mowed lawn or otherwise lacks a wide buffer of trees and shrubs, well, you may not get an A+ in stream stewardship, but help is available! The Catskill Streams Buffer Initiative (CSBI) is a new program that assists owners of smaller streamside properties to enhance or restore streamside vegetation, protecting both the stream and property in the NYC DEP Catskill/Delaware Watershed.

### How does it work?

CSBI coordinators work directly with landowners to understand your specific situation, diagnose streamside-related problems and recommend solutions primarily through enhancing vegetation. A customized "Riparian Corridor Management Plan" can be developed together with the landowner to map



## Catskill Streams Buffer Initiative

*At the Root of Streamside Protection*



out the best ways to manage streamside areas. Qualifying landowners with a Riparian Corridor Management Plan can then apply for funding by October 1<sup>st</sup> to restore native vegetation along the stream. Educational materials and

activities also help landowners understand the critical role of their buffer and how to maintain it for optimal functioning.

### Who qualifies for the grant program?

- Streamside landowners in the NYC DEP Catskill/Delaware Watershed (includes Ashokan Watershed),
- Properties that do not have severe, active erosion requiring extensive streambank restoration or structural protective measures. (although CSBI can support vegetation around structural stream bank protection structures, like stacked rock, but it will not fund the structures).
- Landowner must be willing to provide a contribution toward

the project (monetary or in-kind).

- Projects must meet approved best practices.
- Projects can not be covered by an existing watershed program.

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## We're on the web!

[www.ashokanstreams.org](http://www.ashokanstreams.org)



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ASHOKAN WATERSHED  
STREAM MANAGEMENT  
PROGRAM



SOIL & WATER  
Conservation District

(Continued from cover)

### Why are buffers

**important?** While forested land exceeds 95% of the total Ashokan watershed land cover, development associated with roads, residences, businesses and town centers has occurred along the Route 28 corridor as well as along many of the Upper Esopus Creek's tributaries. These areas are critical to the overall health of the local ecosystem. When properly vegetated, these riparian zones facilitate stream stability and function by providing rooted structure to protect against bank erosion and flood damage. Riparian buffers also offer protection against pollution, nutrient and sediment runoff, provide food and shelter for animals, and moderate fluctuations in stream temperature.

Riparian zones of the Ashokan watershed are also threatened by a number of



**Riparian Buffers keep streams healthy and stable.**

change agents. The spread of non-native, invasive plant species such as Japanese knotweed (*Polygonum cuspidatum*, syn. *Fallopia japonica*) can alter native plant communities and undermine their functional condition. Healthy riparian zones continue to be replaced with lawn grasses, providing little to no bank stability.

CSBI is a partnership between New York City Department of Environmental Protection, County Soil & Water Conservation Districts and Cornell Cooperative Extension. Throughout the Catskill/Delaware Watershed, CSBI is led by a core team of six CSBI Coordinators – five working from County Soil and Water Conservation District (SWCD) offices and a program manager from NYCDEP in Kingston, NY.

If you are interested in learning more about CSBI in the Ashokan watershed or feel your property

may qualify for a CSBI project, contact your local CSBI coordinator, Adam Doan at [Adam.Doan@ashokanstreams.org](mailto:Adam.Doan@ashokanstreams.org) or 845-688-3047. Or feel free to stop by the AWSMP Office at 6375 Hwy 28. Phoenicia, NY 12464.

## Ashokan Watershed Program Announces Grant Opportunities



Ashokan Watershed Stream Management Program recently announced the availability of Mini Grants and Matching Grants for projects, programs, and training in the Ashokan Watershed. These two grant programs are funded by NYC DEP and administered by Cornell Cooperative Extension of Ulster County. The grants are intended for activities that help to implement the Stream Management Plans in the Ashokan

Watershed, or to encourage stream stewardship practices (in the watershed) that are consistent with the Stream Management Program's mission. Electronic versions of the applications are available online at [www.ashokanstreams.org](http://www.ashokanstreams.org).

The purpose of the **Mini Grant Program** is to provide small grants (\$5,000 or less) for projects in the Ashokan Watershed related to

education, outreach, training, arts and other activities that help encourage stream management. Eligible activities include: education programs, speaker fees, funds for training and professional development, research and monitoring projects, aquatic habitat improvement, stream clean-ups, and other community activities and programs that increase and enhance public stream access. A total of \$100,000 has been allocated to Mini Grants.

The purpose of the **Matching Grant Program** is to increase the overall funding for projects that meet Ashokan Watershed Stream Management Program goals by partnering with organizations and towns in the Watershed to seek or enhance external funds. The Matching Grant Program can provide up to 25% of the total budget of a project as match (to a maximum of \$100,000). The funding can be either for direct match to a grant proposal that is to be submitted, or match or enhancement funds for a grant that has already been received so long as the enhancement increases the project's applicability to the Ashokan Watershed Stream Management Program's Action Plan. A total of \$400,000 has been allocated to Matching Grants.

The applications for these grants are accepted on a rolling basis, with the proposals being approved at quarterly advisory council meetings. Anyone who has questions about these programs can call Elizabeth Higgins at (845) 688-3047 or by e-mail at [emh56@cornell.edu](mailto:emh56@cornell.edu).



## Join the Stream Stewards Volunteers!

Do you like streams, helping the environment, being outdoors and meeting other people? The Ashokan Stream Stewards Program is for you!

### What do we do?

Stream Steward projects include restoration of streamside buffers through tree plantings, stream cleanups, removing invasive plants, and educating the public about good stream stewardship. As a Stream Steward, you can also choose or develop projects that work best for you, whether it's physical projects like planting trees or maybe you enjoy staying indoors, helping to organize projects. If you have particular skills to share or a particular stream-related project you want to do, we provide support for you to use your skills successfully to support stream stewardship.

Check our calendar on the back cover or click on [www.ashokanstreams.org](http://www.ashokanstreams.org)

for upcoming events like our stream cleanup on June 26.

An annual one day workshop for Stream Stewards will be provided on July 19 as well as ongoing educational activities as part of our hands on projects. At the one day workshop, stewards get a primer on native plants, stream processes and ecology. We plan to spend most of the time outdoors.

### How do I become a Stream Steward?

The first step is to fill out a Stream Steward Volunteer Opportunity Form. Go to our website to download and print the form. Or just call us or stop by the office. Once you apply, we'll meet with you to learn more about

you and how we can make your volunteer experience rewarding. You can also contact Dona Crawford at: (845) 340-3990 or email at [dm282@cornell.edu](mailto:dm282@cornell.edu) or Michael Courtney at: (845) 688-3047.



**Volunteers restoring a riparian area by planting trees.**

## Youth Watershed Steward Interns Complete Digital Mapping Project

In the cold of last November, three Onteora high school students were walking the waters of the Beaverkill with Global Positioning (GPS) Units. The three Youth Watershed Steward Interns, Angela Cross, Katelyn Benjamin, and Jacques de Beer, were learning how to collect field data for Japanese knotweed, an invasive plant. "Knotweed really stands out in late fall because it has a bright reddish color at that time of year," commented Katelyn Benjamin.

They stayed warmer during the other winter months working indoors to complete a digital map. They uploaded their data points into ArcMap, a Geographic Information System (GIS) software that overlays sets of information in layers on a digital map. "We wanted to learn about how the process of stream assessment works," said Jacques de Beer. The completed map shows their data and previously collected knotweed data projected over aerial photos. The



**Ashokan Youth Watershed Steward Interns present their GIS project at the Youth Symposium at the Ashokan Center.**  
**Photo L-R: Jacques De Beer, Angela Cross, and Katelyn Benjamin**

interns used Cooperative Extension's "Portable GIS Lab" - three laptop

computers - obtained through a grant from Catskill Watershed Corporation.

On March 16<sup>th</sup>, the interns presented their GIS project at the Watershed Youth Symposium: "Student to Student: Understanding the New York City Watersheds" held at the Ashokan Center in Olivebridge. Four other student groups from Margaretville, South Kortright, Northern Catskills Occupational Center, and John Bowne High School in New York City also provided presentations on the following topics: drilling for natural gas in the Marcellus Shale layer, a photo-documentary of a chainsaw and forestry class, aquaculture, and DNA identification of a virus in stream insects. "This was a great experience," said Angie Cross, "when are we getting together again?"

For more information about our public education and other programs, check our website calendar, [www.ashokanstreams.org/calendar](http://www.ashokanstreams.org/calendar).



## Prevent the Spread of Invasive Pests to Forests

Unlike the “British Invasion” of John Lennon and Paul McCartney, if these two beetles were to reach the Catskills, the Asian Longhorned Beetle and the Emerald Ash Borer could have severe ecological and economic impacts. These beetles can kill large numbers of trees as their larvae bore through the tree as they grow, eventually killing the host trees.

Such severe damage to forests also would have a heavy impact on stream ecology and water quality. Forests act as a natural filter and prevent steep slopes from eroding; without them large amounts of sediment would be quickly flushed into streams during storms. Additionally, forestry industries such as maple sugaring and local wood products would be heavily impacted.

Why is this an issue now and not in the past? The transport of Invasive insects has increased largely due to a massive increase in international trade over the last 20 - 30 years. Ships carry these stowaways in wood packing materials such as crates and pallets. Once in the U.S., they fly out from the foreign wood, and proliferate as there are few natural predators.

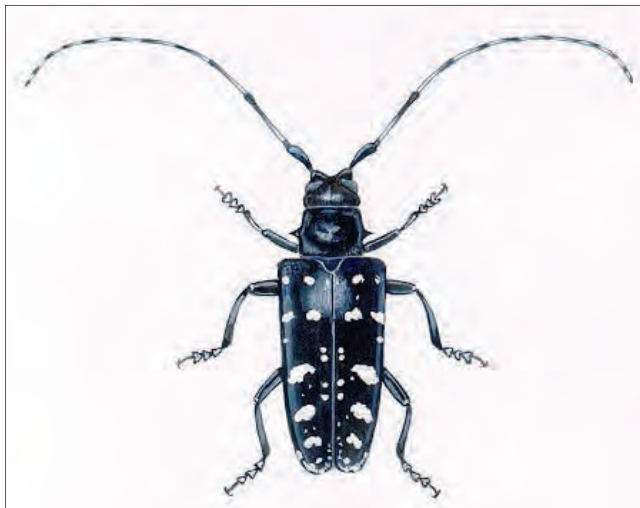


**Asian Longhorned Beetle Damage**

### Asian Longhorned Beetle

The Asian Longhorned Beetle (ALB), latin name *Anoplophora glabripennis* (Motschulsky) is an invasive pest from Asia that is of particular concern because it damages and kills a wide variety of hardwood trees such as maples, poplar, birch, willow, elms among others.

ALB was first discovered in Brooklyn in 1996 with subsequent discoveries in the greater New York City area as well as



**Asian Longhorned Beetle (ALB)**

Chicago, Worcester, MA and Toronto. As far as we know, it hasn't spread to other areas like the Catskills yet. Several populations have been eradicated by the cutting and chipping of hundreds of urban trees, but populations still exist, including within the New York City metropolitan area.

### What Does ALB Look Like?

The adult ALB is 1 to 1.5 inches long not including antennae. The antennae are one to two times the length of its body with white and black bands. It is a very shiny black with white spots. The adult emerges from the tree in the spring leaving a perfectly round exit hole about 1/4 to 1/2 inch in diameter. There are many native look-alikes to ALB and similar looking bore holes. You can check them online at <http://www.uvm.edu/albeetle/identification/index.html>. The ALB is also hard to find and identify from the ground because it usually stays on younger branches near the tops of trees.

### Emerald Ash Borer

Emerald Ash Borer (EAB), latin name *Agrilus planipennis* (Fairmaire) is an invasive beetle also introduced from eastern Asia. EAB kills all species of ash trees native to North America. First detected near Detroit in 2002 it has now spread to 13 states and two Canadian provinces. Ash mortality is

100% near Detroit and is widespread in all the affected areas. Emerald ash borer was first located in New York State on June 17, 2009 in Randolph, NY (Cattaraugus County).

“It is not a question of if it (EAB) gets here, but when.” states Mark Whitmore, a Forest Entomologist in Cornell University’s Dept. of Natural Resources. “This beetle has the potential to forever change the face of our forests and the impact will be felt by all communities in

New York.” Ash trees comprise about 10% of the trees in NY’s hardwood forests and provide specialty products like tool handles and baseball bats. Ash trees are even more valuable in urban areas because they are commonly planted along streets and in landscaping.

### What Does EAB Look Like?

Like the name implies, Emerald Ash Borer has metallic emerald green wing covers that are shiny and somewhat glittery. Adult beetles average 3/8 inch to 3/4 inch) long and 1/6 inch wide (males are slightly smaller than females). EAB makes a distinctive 1/16 inch to 1/8 inch wide D-shaped exit hole in the bark of the tree when adults emerge in the spring.



**Emerald Ash Borer (EAB)**





(Emerald Ash Borer Continued)

## **WHAT CAN YOU DO?**

### **DON'T MOVE FIREWOOD!**

#### **You Could Be Giving Invasive Insects a Free Ride!**

Not moving firewood is not only a good general practice, it's the law. State regulation requires that firewood not be moved more than 50 miles. The bark of firewood and tree debris can harbor non-native insects and diseases that kill trees. You never know what non-native pests you might be giving a free ride to our wild forests. Firewood is a common vector for these insects and diseases. You also support the Catskill economy by purchasing firewood from local vendors. Commercial lumber that is kiln-dried is OK as the heat process kills most pests.

#### **Can't You Just Use an Insecticide?**

The only currently available methods for ALB and EAB are to quarantine and destroy all the affected trees and possibly nearby trees by cutting and chipping

them. This method has been successful in eradicating several urban populations of ALB in the United States at the cost of many trees. Millions of ash trees have been cut in attempts to stop EAB. If these insects or others were to become established in a forested area, it is likely that large areas of forest, or ash trees, would need to be cut down and chipped to prevent further damage. In some cases, insecticides have been used as a preventative measure in threatened areas, but not for eradication. Cornell University is researching biological control for ALB using a fungus. However, a viable control method is likely to take many years.

#### **To report a Sighting of These Insects Contact:**

Cornell Cooperative Extension of  
Ulster County Horticulture Hotline – for  
insect identification if you have a sample.

(845) 340-DIRT or

(845) 688-3047

#### **ALB Hotline:**

In New York: 1-877-STOP ALB

(1-877-265-0301)

In New Jersey: (732) 815-4700



**D-Shaped exit hole of Emerald Ash Borer**

NYS DEC Firewood Hotline:

(866) 640 - 0652

If you suspect illegal transport of potentially infested firewood or nursery stock please contact the DEC TIP hotline at  
(800) 847 7332 (800-TIPP-DEC).

For more information, go online to:

[www.dec.ny.gov](http://www.dec.ny.gov)

[www.nysparks.state.ny.us](http://www.nysparks.state.ny.us)

[www.na.fs.fed.us](http://www.na.fs.fed.us)

#### **References:**

- 1) USDA Animal and Plant Health Inspection Service (2008). *Wanted: The Asian Longhorned Beetle*. Washington, DC
- 2) New York State Dept. of Environmental Protection. *Don't Move Firewood*. (Factsheet). Albany, NY
- 3) Sea Grant of New York, Cornell Cooperative Extension. *New York State Invasive Species Clearinghouse*. Retrieved on March 23, 2010 from: <http://nyis.info/Default.aspx>.
- 4) Cornell Cooperative Extension. *Emerald Ash Borer: The Tiny Green Killer*. Retrieved on March 23, 2010 from: <http://cce.cornell.edu/tureStorys/Pages/EmeraldAshBorer.aspx>.



**EAB damage inside tree bark**

## Safety First! - New Flood Preparedness Guide Available

**While spring floods may have abated, flooding can happen any time of the year.**

**Get a complete copy of our Flood Emergency Preparedness Guide online at [www.ashokanstreams.org](http://www.ashokanstreams.org) or stop by our offices for a printed copy.**

### Turn Around - Don't Drown!

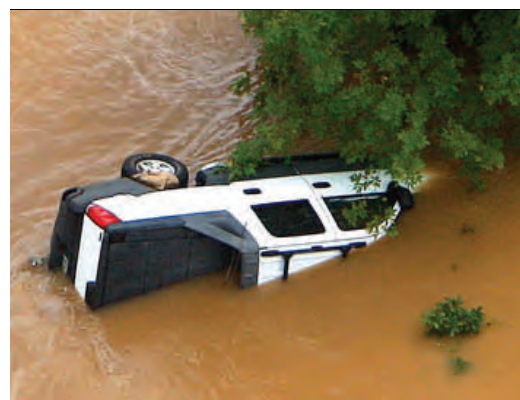
Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.

**Do not drive into flooded areas or around barricades.**

If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away. Nearly half of all flash flood fatalities are vehicle related.

**The following are important points to remember when driving in flood conditions:**

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups!



## How Do I Prevent Flood Damage to My Property?



- Do not mow to the stream.
- Maintain a wide buffer of trees and shrubs to slow water and prevent erosion.
- Elevate the furnace, water heater, and electric panel if susceptible to flooding.
- Install "check valves" in sewer traps to prevent flood water from backing up into the drains of your home.
- Seal walls in basements with waterproofing compounds to avoid seepage.
- Secure propane tanks and other objects that could be carried away in flood waters.
- Install stormwater management systems around buildings. Keep ground sloped away from your house.

## Sign up for NY-ALERT!

By signing up for NY-Alert, you can receive warnings and emergency information via the web, your cell phone, email and other technologies. NY-ALERT is a tool to provide you with critical information when you may need it most.

Signing up for NY Alert is free. Your information is protected and never shared with any one else. You can modify what type of information you receive or unsubscribe at any time.

Information sent by NY-ALERT includes severe weather warnings, significant highway closures, hazardous materials spills, and many other emergency conditions. Additionally you will find information regarding response actions being taken by local and state agencies and protective actions that you should take to protect you, your family and your property.

**NY-ALERT**

**To sign up, go online to [www.nyalert.gov](http://www.nyalert.gov)**





# ASHOKAN WATERSHED STREAM MANAGEMENT PROGRAM



## Ashokan Watershed Conference

Floodplain and Stormwater Practices for Towns  
and Landowners

Saturday, May 1, 2010

9:00 am - 2:30 pm

Belleayre Mountain - Overlook Lodge

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REGISTER NOW!

[www.ashokanstreams.org](http://www.ashokanstreams.org)

or call 845-688-3047

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ASHOKAN WATERSHED  
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## Calendar of Coming Events

Please RSVP or register for all events by calling Colleen Griffith at (845) 688-3047 or email: [cas55@cornell.edu](mailto:cas55@cornell.edu). Please provide phone and email information in case we need to reach you.

**Saturday, May 1**  
**9:00 am – 2:30 pm**  
**Ashokan Watershed Conference**

Belleayre Mountain, Overlook Lodge

Cost: \$15

**Saturday, May 22**  
**Knotweed Pull Day**  
**9:30 am – 12:30 pm**

Meet at our office, 6375 Route

28. We'll caravan to work at key locations of invasive knotweed colony! Bring shovels, boots, gloves, waterbottle, and sun protection.

**Saturday, June 12**  
**Ashokan Watershed Stream Clean-up Day!**  
**9:30 am – 12:30 pm**

Organize your own neighborhood stream cleanup, or come to the Esopus clean-up. Meet at our office at 6375 Route 28.

**Potluck BBQ to follow at 12:30.** Bring sturdy stream-walking shoes or boots, work gloves, water bottle, sun protection, and dress for weather.

**Saturday, July 17**  
**9:30 am – 4:00 pm**  
**Ashokan Stream Stewards Training: Become a Stream Steward!**

See article page 3 or website for more information and to download a volunteer opportunity form.

**September 6 – 19**  
**Ulster County Creek Week**  
Watershed awareness, recreation and education events will be scheduled in the Ashokan and other watersheds around Ulster County. See our website for more details this summer: [ashokanstreams.org](http://ashokanstreams.org).

### Receive Esopus Creek News by email!

Contact Colleen Griffith by calling 845-688-3047 or email [cas55@cornell.edu](mailto:cas55@cornell.edu)

Visit our new website at [www.ashokanstreams.org](http://www.ashokanstreams.org)

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Ashokan Watershed Stream Management Program

# Esopus Creek News

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