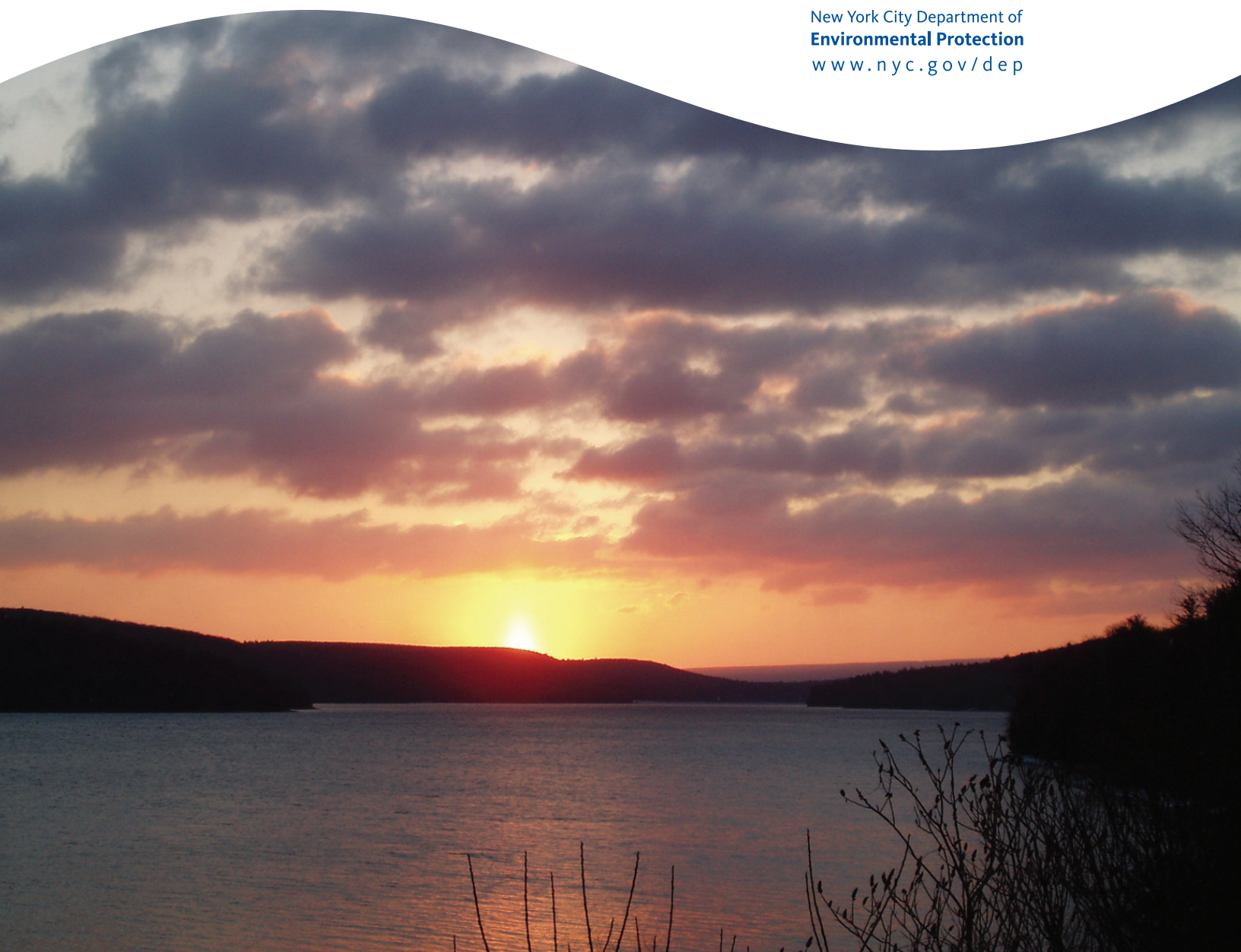


Watershed Recreation

A newsletter produced by the New York City Department of Environmental Protection (DEP) for the anglers, hikers and hunters who enjoy the lands and waters of the New York City water supply.



New York City Department of
Environmental Protection
www.nyc.gov/dep



Watershed Recreation

Fall 2009



*Didymo algae in Esopus Creek.
Picture from: www.dec.ny.gov/animals/50272.html
Photo Courtesy of Tim Daley,
Pennsylvania Department of Environmental Protection*

Didymo found in the Esopus!

The invasive alga known as Didymo or “rock snot” was identified in the Esopus Creek this spring from the Shandaken Portal to the Ashokan Reservoir. Seen in other areas of New York such as in the Batten Kill and Delaware River tailwaters, this is the first occurrence within the NYC water

supply system. Although generally believed not to be a threat to public health, this invasive has the potential to blanket stream bottoms, limit invertebrate abundance and significantly impact fisheries. Didymo is primarily found in coldwater, flowing streams and attaches to the stream bottom by stalks. As the stalks lengthen, Didymo can form wavy mats. It has a wet wool-like texture that is not slimy and does not fall apart when rubbed between fingers. Didymo cells are microscopic, and this invasive algae can be spread by a single drop of water.

The Esopus Creek is a popular recreational water for fishing and tubing, probably one of the ways it was introduced into the creek. Those using the stream are requested to do their part and not contribute to the fur-

ther spread of this aquatic invasive. Anglers, kayakers, canoeists, tubers and other users are asked to comply with New York States Department of Environmental Conservation’s recommendations for treating equipment and taking precautions which they refer to as “Check, Clean and Dry.”

Check: Before leaving a stream, remove all obvious traces of algae and look for hidden clumps and leave them at the affected site (away from the water!). If any algae is found later, when you get home for example, it should be disposed of in trash receptacles, not washed down drains.

Clean: Suggested treatments vary. A liquid solution can be made by recreational users for treating their equipment. The solution needs to completely penetrate thick, absorbent items particularly on waders and boots.

Continued on page 3

Calendar of Events

AUGUST

- 14-16 Grahamsville Little World’s Fair
- 17-22 Delaware County Fair, Walton, NY

SEPTEMBER

- 10-13 Yorktown Grange Fair
- 12 Kensico Environmental Enhancement Program – “Take a Kid Fishing Day”
- 26 South Salem Library Fair

OCTOBER

- 4 Mahopac Street Fair
- 17 Teatown Fall Festival
- 23-25 Great Swamp Fall Festival

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DEP Access Permits can now be renewed online at www.nyc.gov/dep



DEP's Patrick Goodall and DEC's Sadie Sprague installing PAA signage on City property in the town of Andes in 2008. Photo by Don McClenon

DEP Hunting Tags Eliminated

In its continuing effort to lift barriers for recreational users to access City-owned water supply lands, DEP has eliminated the requirement for DEP Hunt Tags. Since the beginning of the DEP hunting program, hunters were required to obtain a free hunting tag. Hunt tags were useful to track hunters on City lands, assess the success of the hunting program and provided a database of hunters in case security issues arose. In addition, hunters were asked to complete a survey to help obtain additional information such as properties used, safety issues, harvest information, and user recommendations. The early days of the hunting program allowed deer hunting in only a few areas. Over time, the City opened additional properties to deer hunting and added hiking as a use. In

2004, DEP added small game hunting as an additional use on a pilot basis and as the pilot was successful, DEP expanded small game hunting opportunities on a permanent basis.

Hunters using City land have been very responsible and the number of incidents, such as trespassing onto private land, conflicts with other users (hikers, fisherman), and violations of the NYS Environmental Conservation Law have been minimal. In addition, much of non-reservoir lands in the Catskills have been opened as Public Access Areas which do not require a DEP hunting tag. It is hoped that the elimination of hunt tags will encourage more hunters to utilize City lands, especially for deer hunting, which will help reduce high deer density impacts on the forested landscape. Except for PAA lands, DEP Access Permits will still be required and, of course, a NYS hunting and fishing license continues to be required.

DEP to Open Additional Recreation Lands in 2009

Hopefully by now many of you have had the opportunity to take advantage of DEP Public Access Areas (PAAs) that were open last year on west of Hudson City water supply

lands. These properties allow hunting, fishing, hiking, and for the first time ever, trapping on City land without the need for a DEP Access Permit or Hunting Tag. Over 15,000 acres were opened as PAAs and DEP staff were busy in the summer and fall of 2008 posting these properties. In January of 2009, DEP staff reviewed its portfolio of lands that were posted "no trespassing," that is, areas that were not open for recreational use. DEP identified over 15,000 acres west of Hudson that we will begin posting for PAAs. In addition a few areas around the Ashokan reservoir will be opened for the first time as "entry by permit" for hunting. Additionally, approximately 2200 acres east of Hudson will be opened for "entry by permit" and will include a mixture of hunting, hiking and fishing lands. While DEP is certainly promoting greater recreational uses of its lands, users must keep in mind this land is vital to the protection of the water supply for over 9 million New Yorkers. Land must be used in a way that reduces natural resource impacts such as vegetation removal, erosion, and the accumulation of debris and garbage. If over use is discovered during DEP field inspections, it may be necessary to temporarily or permanently close a recreation area.

Didymo found in the Esopus!

(Continued from page 2)

For non-absorbent items:

- ☘ Detergent or salt: soak or spray all surfaces for at least one minute in a 5% solution (by volume) of dishwashing detergent or salt (7 ounces of detergent or salt added to a gallon of water).
- ☘ Bleach: soak or spray all surfaces for at least one minute in a 2% solution (by volume) of household bleach (3 ounces of bleach per gallon of water).
- ☘ Hot water: soak for at least one minute in very hot water (140°F –

hotter than most tap water) or for at least 20 minutes in water kept at 115°F (uncomfortable to touch).

For absorbent items: longer soaking times are required.

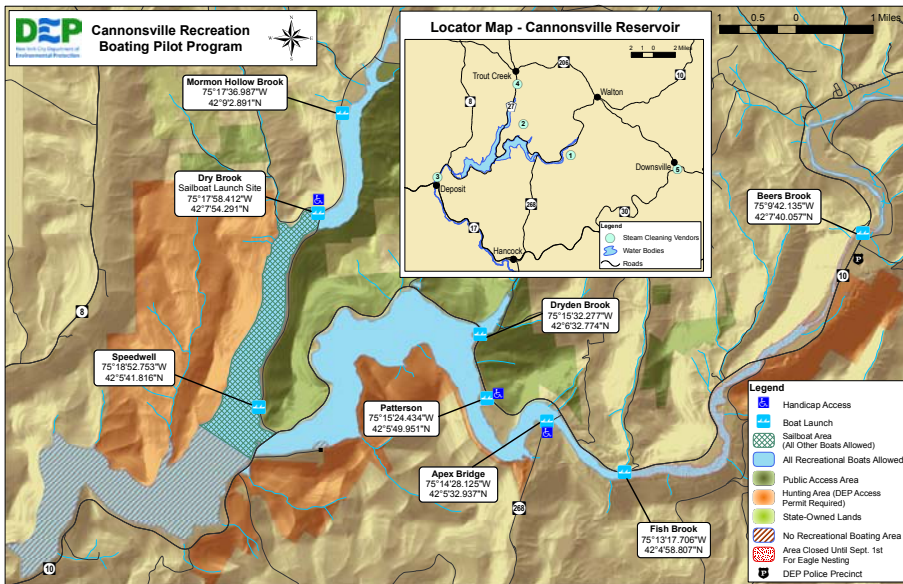
- ☘ Hot water: soak for at least 40 minutes in water kept above 115°F.
- ☘ Hot water plus detergent: soak for 30 minutes in hot water kept above 115°F, containing 5% dishwashing detergent.

Dry: If cleaning as described above is not practical, after the equipment is completely dry to the touch, wait an additional 48 hours before use in any new waterway. Check thick, absor-

bent items closely to assure that they are dry throughout. Equipment and gear can also be placed in a freezer until all moisture is frozen solid.

If cleaning, drying or freezing is not practical, restrict equipment use to a single water body. Alternatives to felt-soled waders such as rubber studded boots are strongly recommended. It is also important that any gear used out of State be treated before use in New York waters!

Although there are no mechanisms to eradicate this algae, we can all do our part to not contribute to its spread.



Cannonsville Reservoir Recreational Boating Pilot Project

In 2008 DEP began developing a pilot program to expand recreational boating opportunities at the Cannonsville Reservoir. A committee was formed and a kick-off meeting was held to initiate development of the program, the committee consisted of various DEP staff, the Delaware County Chairman of the Board of Supervisors, the Town Supervisors of the Towns of Tompkins and Deposit, the Delaware County Watershed Affairs Commissioner, representatives from the Environmental Protection Agency, NYS Department of Environmental Conservation, NYS Department of Health and the Catskill Center for Conservation and Development. The committee used a collaborative, consensus building approach as it studied the issues and constructed the program. The committee analyzed the mission, researched facts, conducted site visits, developed and analyzed alternatives, and formulated their recommendations. The committee sought and obtained input from numerous stakeholders at invitational meetings and throughout the process. The committee considered all input from all sources to better refine the proposed program. Ultimately, the committee decided to pursue a program that allowed several different types of watercraft launching from

several specified sites around the reservoir including one site that would allow small sailboats to be launched. Launch sites were coordinated with the NYSDEC to prevent conflict with nesting eagles and were coordinated with the NYSDOT for public safety for access along NYS Route 10. The proposed plan included requirements for individual DEP Access Permits for those age 16 years and older and boat tags which are given to boaters after they have their vessel and equipment (oars, paddles, sails) steam cleaned. Boaters will be able to secure temporary (7 days or less) or seasonal (the entire summer season) boat tags. Steam cleaning services were to be provided by several local vendors, these vendors would be trained and certified by DEP before performing the service. The program would run from Memorial Day through Columbus Day each year for 3 successive years starting in 2009 and would be evaluated for improvements along the way. The Watershed Recreation Rules and Regulations were amended to include this program.

DEP Continues Work on Recreational Land Use Permits

DEP has issued, or is currently working on, several revocable land use permits to allow recreational opportunities on City land. In 2008, DEP

issued NYSDEC a land use permit to allow mountain biking on an 800 acre piece of land in the town of Windham. Also in Windham is a land use permit issued to the town to construct and maintain an athletic field with associated parking.

To date, DEP has issued two land use permits to snowmobile clubs in the Catskills to maintain trails over City land that are linked to a larger NYS sanctioned trail system.

Also in 2008, DEP issued a land use permit to the Gilboa-Conesville Central School to build and maintained an interpretive and nature trail for students and their guests. School children and teachers will plan and construct a trail as part of their science class. In addition, students will be able to lead parents and others on interpretive hikes.



Picture of snowmobile trail on City land. Photo by Fred Reinhart.



Picture of future trail location that was laid out by DEP Gilboa Operations staff and Gilboa-Conesville School Officials. The trail will be constructed in 2009. Photo by Mike Fleischman.

Work also continues on a land use permit to Teatown Reservation in the town of Yorktown to construct and maintain a trail that will link lands owned by the City, Westchester County and Teatown Reservation for a continuous trail. These are all examples of partnerships that DEP is developing to allow recreational uses that are compatible with water quality protection.

Asian Longhorned Beetle: Enemy of Forest and Landscape Trees

Introduction:

Asian Longhorned Beetle (*Anoplophora glabripennis*; ALB) is an invasive wood-boring insect native to China, Korea and Taiwan. It almost certainly came into the United States hidden in solid wood packing material-the pallets and crates that are used to ship products around the world.



Wooden shipping pallets (image credit: NYS DEC.)

It was first sighted in street trees in Brooklyn, NY in 1996. Infestations now exist in parts of New York City and Nassau and Suffolk counties in New York. An infestation is being eradicated in Middlesex and Union counties in New Jersey. Infestations in Chicago, IL, and Hudson County, NJ, were declared eradicated in early 2008. Most recently, a new infestation of ALB was discovered in Worcester, Massachusetts in August 2008. ALB is a serious threat to our forests and landscape trees because of its very costly ecological and economic impacts.

The Asian longhorned beetle threatens to devastate the eastern forest--approximately 48 million acres – that stretches from New England to beyond the Great Lakes. These forests protect public drinking water quality and many rare species and natural communities. The ALB threat to urban trees is also significant. A study by the USDA Forest Service study estimated that if the Asian longhorned beetle became established nationwide, it would probably kill 30% of all urban trees valued at \$669 billion.

According to Animal Plant Health Inspection Service, ALB has already cost the state and federal government over \$269 million dollars since 1996. This includes tree removal (30,000 trees have been removed so far) or treatment with systemic insecticides, and tree replacement. Prior to the 2008 Worcester MA ALB infestation, it was estimated that eradication of Asian Longhorned Beetle could eventually cost about \$365 million and take until 2009 to complete.

Why is Asian Longhorned Beetle Such a Serious Threat?

- Attacks many hardwood forest and landscape trees. ALB feeds primarily on:
 - maple species (*Acer*), especially sugar maple (*A. saccharum*) and including boxelder
 - birch, (*Betula*)
 - elm, (*Ulmus*)
 - poplar, (*Populus*)
 - willow, (*Salix*)
 - horse-chestnut, (*Aesculus*)
 - ash (*Fraxinus*), especially green ash (*F. pennsylvanica*)

These trees represent many billions of dollars to the U.S. economy by supplying lumber, wood products, maple syrup, and promoting tourism (Host Trees). A complete list of host species is available from USDA APHIS-PPQ.

- Kills Trees.** ALB kills young and mature trees by tunneling within the trunk and branches, disrupting sap flow and weakening the tree. Repeated damage leads to tree death.
- Potentially disrupts forest.** Because this beetle attacks many different tree species, it could significantly disrupt the forest ecosystem, if it became established over a large area.
- No controls.** No natural enemies or insecticides to effectively control ALB, although the USDA - APHIS is conducting experiments testing the effectiveness of some insecticides. (Management)

- Potential damage to forests far greater than Gypsy Moth, Dutch Elm disease and Chestnut Blight combined.

Description:

There are six stages to the ALB life-cycle: starting as an egg, then the three stages of larva (early, middle, and late), then pupa, and finally adult beetle. ALB usually takes about one year to complete a full life cycle but it can take up to two depending on when the eggs are laid. Adult beetles can be found between the months of July and October, but if the fall temperatures are warm they might be present later in the season. The beetle usually stays on or near the tree that they emerge from. Female beetles lay between 35-and 90 eggs per lifetime. It takes 10-15 days for the eggs to hatch. At the early stage of larvae, they feed in the living tissue (cambium layer) under the bark of the tree. As they grow larger they bore deeper into the wood where pupation takes place. After pupation, adults emerge from a round exit hole they create by boring a tunnel through the wood. The adults feed on leaves, small twigs, and bark.

Adult beetles are anywhere from $\frac{3}{4}$ to $1\frac{1}{4}$ inches long. They are a glossy black with white (can be yellowish) spots on their back and black and white bands along their antennas which are around $1\frac{1}{2}$ to $2\frac{1}{2}$ times the length of their body.

Asian Longhorned Beetle-adult. (image credit: NYS Department of Agriculture and Markets)



You are not likely to see them at the larval or pupal stages because they are nestled deep inside the trunk of the tree. However, you might see:

- The little $\frac{1}{2}$ inch niches where the female beetle chewed out a groove in the bark to lay her egg (Only one egg is placed in each site). These "oviposition pits" usually look orange in color.

- Accumulation of coarse sawdust or “frass” around the base of an infected tree or where branches meet the main stem
- Oozing sap from wounds made by the beetle
- Round exit holes that are usually about a 3/8 of an inch in diameter were adult beetles emerged
- Severely damaged tree may have visible larval tunneling

Damage caused by ALB will start in the canopy and then work its way down the branches onto the trunk of the tree. Another thing to look for is woodpecker activity. Some woodpeckers are attracted to the larvae inside the infested trees, so it is a good idea to investigate any host trees that you might see a woodpecker working on.

Serious Ecological and Economic Impacts:

As an invasive species, ALB is such a danger because it is polyphagous, feeding on many different species of trees. It has no known predators or diseases within the United States, hence no natural controls. It has the potential to do more damage than the gypsy moth, Dutch elm disease, and chestnut blight combined by destroying millions of acres of hardwood forest. ALB-caused damage to the lumber, nursery, maple syrup, and tourist industries may also have devastating impacts to our economy.

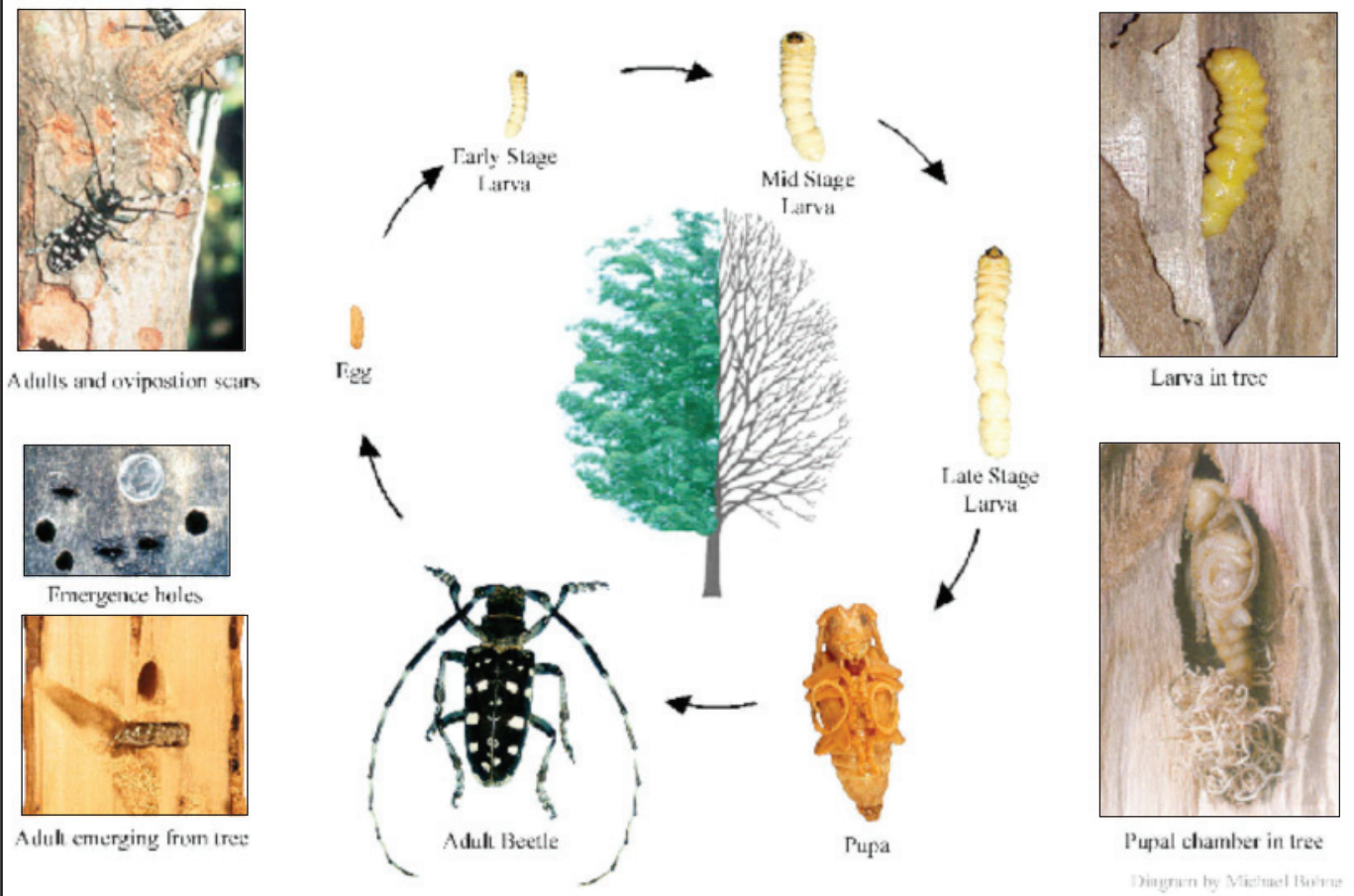
Unlike most other cerambycids (long-horned beetles), ALB will infest both healthy and weak trees and has no preference for any particular stage of tree maturity. It kills trees by tunneling deep within the tree branches and trunk tissues. This disrupts sap, water,

and nutrient flows through the tree, thereby weakening and ultimately kills the trees. It may take a couple of years (and up to 7 years) of re-infestation for the tree to die completely.

Once this happens the beetle will move to another tree close by. ALB is known to fly only about 400 yards on its own. However, humans have a tendency to move the beetle greater distances through activities such as timber removal and transport of firewood and landscape debris.

Over time, if ALB is not contained and eradicated, it can wipe out millions of acres of forest, radically alter forest age structure and species composition. This affects not only the trees but long-term ecological relationships within natural forest communities and niches that old growth forests require to survive.

Asian Longhorned Beetle Lifecycle










The forests in the NYC watersheds are a high priority for protection from ALB since they are predominantly hardwoods, which ALB is attracted to, and serve as a natural filtration system for the NYC water supply, which serves over 9 million people with public unfiltered drinking water.

Key to Protection - Early Detection and Rapid Response:

Prevention is the most cost-effective and best way to protect the environment from these invasive creatures. In order to prevent or minimize the spread of ALB early detection and rapid response are of the utmost importance. Since the discovery of ALB there has been a response to keep this pest under control and to eradicate it. Quarantine areas have been put in place to minimize the risk of spreading ALB. All infected trees have either been treated with insecticide (if there are no exit holes present) or removed and destroyed by chipping and burning.

However, the concern to the Catskills is that people who live within the quarantined developed areas and who have second homes or spend time hiking, camping or skiing in the Catskills could possibly carry infested firewood with them. This is why it is so important to create public awareness and survey high risk sites. It is important to:

-  Buy firewood locally; don't transport from home
-  If you live or work in a USDA-quarantined area, do not move firewood or other wood materials out of these areas
-  Keep firewood within a 50 mile radius (or less) of where it was cut (This is now NY State Law)
-  Create public awareness and outreach programs

-  Survey areas where ALB might be unknowingly transferred (for example, campgrounds or train yards)
-  Examine susceptible trees in your area
-  Report signs and symptoms of ALB to experts!

You can make a difference. Members of the general public were the first to spot and report ALB in Jersey City, Worcester, MA and Chicago.

Report sightings of Asian Longhorned beetle:

When reporting a suspected ALB sighting, it is helpful to have the following information ready to offer: what you observed, the date, and the location (GPS coordinates of tree, or street address and sketch map). If you are able to capture a specimen, put the insect in a crush-proof container and place it in the freezer to kill it. You may be asked to mail the killed specimen to an expert for identification.

Links:

NYS Department of Agriculture & Markets
Phone: 1-800-554-4501, ext. 72087
www.nyscaps.com

NYS DEC Lands and Forest
Region 3 (New Paltz) - 845 256 3000
Region 4 (Stamford) - 607 652 7365

USDA Animal and Plant Health
Inspection Service
1-866-265-0301
www.aphis.usda.gov/newsroom/hot_issues/alb/alb_report.shtml

Sources for this article include:

Rutgers Cooperative Extension
njaes.rutgers.edu/alb/

University of Vermont: www.uvm.edu/~entlab/albeetle/faq.html#1

USDA APHIS Massachusetts Regulated Area: The Asian Longhorned Beetles: www.aphis.usda.gov/publications/plant_health/content/printable_version/faq_alb_mass_regarea.pdf

USDA-APHIS: www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/index.shtml

www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/downloads/hostlist.pdf

New York State Department of Agriculture and Marketing, CAPS: www.agmkt.state.ny.us/CAPS/forestry/health.html

US Forest Service (Northeastern Area): www.na.fs.fed.us/fhp/alb/

New York City Department of Parks and Recreation: www.nycgovparks.org/sub_your_park/trees_greenstreets/beetle_alert/beetle_alert.html

Other Sources:

APHIS Factsheet
www.aphis.usda.gov/publications/plant_health/content/printable_version/faq_alb_07.pdf

The Nature Conservancy. 2008. Asian Longhorned Beetle. tncinvasives.ucdavis.edu/moredocs/anoglao2.pdf

Update:

DEP has been working with the USDA and other partners to train its staff to recognize ALB or signs of it while on City land.

Contact Us

For immediate Access Permit issuance, printable maps of recreation areas, application forms, answers to frequently-asked questions, recreation rules and regulations, up-to-date recreation area lists, recreation program schedules and other information, go to Recreation on DEP's web site at www.nyc.gov/dep.

DEP Access Permits
71 Smith Avenue
Kingston, NY 12401
800-575-LAND (5263)

For permit inquiries write to recreation@dep.nyc.gov. Please note that this replaces our former address, permits@dep.nyc.gov, which will soon be inoperative.

For information about specific recreation areas, reservoirs, programs such as interpretive hikes and boat storage and registration, call the DEP Regional Office for that area:

Ashokan (Ashokan Reservoir)
845-657-2663

Carmel (East of Hudson Lands)
845-225-8144

Downsville (Pepacton and Cannonsville Reservoirs)
607-363-7009

Gilboa (Schoharie Reservoir)
607-588-6231

Grahamsville (Rondout and Neversink Reservoirs)
845-985-0386

Mahopac (East of Hudson Reservoirs)
914-232-1309

To report dangerous or suspicious activity, water quality threats or to report fish kills on City-owned reservoirs and rands call the DEP Police at **888-H2O-SHED**.



Great catch on Pepacton Reservoir

Jake Mierop caught this beautiful 5 pound brown trout on the Pepacton Reservoir. Jake said he enjoys fishing on the Pepacton and with a catch like this you can see why.



Cleanup on Pepacton Reservoir with members of the Andes Outdoor Club

On May 6th members of the Andes Outdoor Club, an extremely pregnant Jeanine Scinta-Sass and fellow teacher Ed McGee joined DEP Staff for a cleanup on the Pepacton Reservoir.



Wetlands Planting Project on Lake Gleneida

On May 29th, 27 students and 4 teachers from Carmel High School volunteered to take part in a Wetlands Planting Project on City property near Lake Gleneida in Carmel. The students were primarily from the Carmel High School Wrestling Team and Environmental Club but others attended helping to make it a great day. Everyone worked for hours and when the final plant went in the ground it was time for a group shot. These students and teachers worked together on this project to help leave something to their community. The hope is this area will remain a place of constant color through the seasons.

A special thanks go to the volunteers for the day and all the staff from DEP who made it possible. Thanks to local residents who stopped to encourage everyone and to the passing motorists offering cheers throughout the day. A special recognition to Lynn Greenwood, a local resident who stopped by to offer his support and brought a fishing lure he hand tied for everyone.

It was a wonderful day and DEP would like to continue this project as an annual event.

