

When Disaster Strikes

Disasters have the extraordinary potential to bring out the best in us. In times of crises, communities have a way of pulling together and lending a helping hand, especially in the face of natural disasters. This has been no less true for disasters which have threatened our trees.

An example of the many participatory program parts and pieces I developed was one in response to *Anaplophora glabripennis* - Asian Longhorned Beetle - the *ALB* infestation discovered in NYC in 1996 – an insect Switzerland has also had to deal with.

ALB

Citizen action was a very critical ingredient in the response to the discovery of *ALB* in the Greenpoint / Williamsburg community of Brooklyn NY.

The importance of citizens was evident from day one as the presence of *ALB* was not discovered by an Urban Forester or an Arborist or any landscape professional. It was discovered by a local resident – Mr. Ingram Carter - who was concerned that someone was vandalizing the street tree in front of his house by drilling holes along the trunk of this *Acer platanoides*.

Our local resident was so concerned with the damage that he decided to play detective to see if he could catch the who that was drilling these holes. To his astonishment, the culprit was not a who but a what.



Asian Longhorned Beetle. Kenneth R. Law, USDA APHIS

Not only was our local resident able to give the culprit a face, his capture of the large and exquisite what was the opening salvo in a protracted war against *ALB* - an invasive, very exotic, wood-boring insect that globalized its way from Asia to the US, Canada and Europe in untreated wooden pallets with a host list consisting of almost every urban-tolerant tree species. With thousands of infested trees being removed from NYC's Urban Forest, it became painfully clear that this problem could not be addressed without additional informed eyes.

I proposed and was awarded Federal funding to develop **The New York City Asian Longhorned Beetle Public Outreach Program** for NYC's residents. The program intent: to inform all NYC residents about *ALB* and how they could help - the short-term, crisis-driven goal.

But also, to turn the disaster into a positive long-term benefit – to foster a real tree awareness and sense of stewardship. Rather than survey the entire City's trees for *ALB* – I was hoping instead, to grow the existing tree - people relationship – the one that already existed between people and the trees they are intimate with – to have them observe the tree that lives in front of the place where they live, the trees they pass every day on their way to work, or walking the dog or going to the supermarket. Their trees!!!

The program I developed was created to address as broad a base as possible. It's delivery was made possible with the help of a wonderful team of partners from Federal and State government agencies, not-for-profit institutions, local elected officials, and the private sector. The diverse program's highlights were:

- **Battling the Beetle:** How to stop your neighborhood tree terminator – an all-day Saturday conference on *ALB* for professionals and citizens, funded by the Forest Service, NYS Department of Environmental Conservation and Con Ed – NYC's primary utility company as conference host. This conference featured a morning of presentations from an international array of scientists, to provide an accessible understanding of *ALB*, its life cycle and management possibilities in its non-native areas of infestation, followed by an extensive Q&A. The afternoon saw the 150 attendees (of which more than two thirds were from affected communities) divided into teams to search the constructed "infestation simulations" for signs of *ALB* presence, The subsidized registration fee of \$15.00 covered attendance, all resource handouts, lunch + 2 coffee breaks and mini-grants were available for citizen attendees from disenfranchised communities. The idea was to introduce citizens to *ALB*, especially those living and working in *ALB* quarantine zones, and to the professionals and scientists who would be working with those community members. It was the kick-off for all the Outreach Program components, including:

- **Suggested Woody Substitutes for *ALB***

To assist landscape professionals in choosing comparable alternatives to *ALB* host species. The resource presented a selection of host species, organized by the characteristics that made them traditionally distinctive and useful, grouped by color, texture, size, flowering and fruiting attributes as well as preference for growing conditions. What was then offered were urban-tolerant non-host species substitutes as food-for-thought.



- **Living & Working in an ALB Quarantine Zone +**

- **The Citizen's Guide to Beetle Busting brochures.**

The brochures were developed as useful tools with which to:

- identify *ALB* – where it came from, how it arrived in our communities and what to look for complete with *ALB* photos and descriptions of all its signs and symptoms;
- know what to do if there was evidence of *ALB* presence – either a suspected sighting of *ALB* or resulting tree damage;
- quarantine zone information and supporting maps.

These brochures were distributed:

- at NYC/ NYS tree/ landscape-related events
- in a countertop display, hosted by 100 local retailers;
- as a Con Edison utility bill “stuffer”, mailed to every NYC customer.



- **The Beetle Buster Toolbox**

a traveling presentation kit containing script, slides, kiln-dried infested wood, a pinned *ALB*, larva, and frass. I developed the Toolbox in collaboration with the University of Vermont Entomology Lab with material contributions from Dr. Michael Smith of the USDA Agricultural Research Service.



Every trainer received a trainer t-shirt, designed by AI Zürcher and funded by Con Ed.

25 Toolboxes were given to 25 greening organizations, committed to being trained in order to offer free workshops to communities within the quarantine zones. The Train the Trainer sessions were conducted by myself along with USDA Forest Service personnel at donated locations in Brooklyn, Queens and Manhattan.

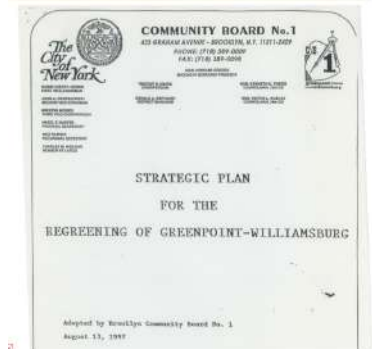


Con Edison also privately funded an additional 25 Toolboxes for interested public schools. Since the study of invasive species was part of required NY State curriculum, many public schools took advantage of the presence of an iconic exotic invasive. As a result, I had an opportunity to present many Toolbox-based lectures to schools around NY State, as *ALB* was an excellent example of an exotic invasive species with potentially devastating impacts on the entire State's environment and economy.

- **Specifications for the Replacement Tree Planting Initiative.**

A Community Board 1 Re-greening Greenpoint/ Williamsburg planning committee was formed in response to community protests demanding replacement trees. The goal was to develop a Strategic Plan for the re-greening of those areas devastated by ALB. This Plan would address the state of tree planting specifications with an interest in developing a more up-to-date Best Management Practices approach to urban tree selection, planting and establishment.

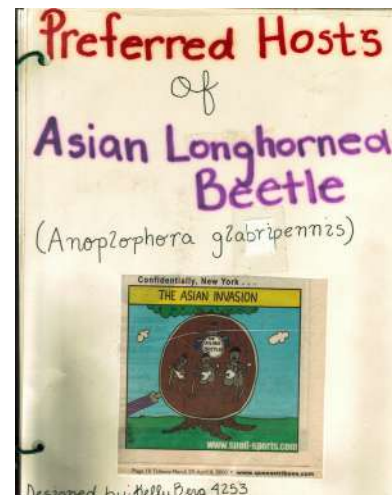
In addition to myself and the USDA Forest Service, the professional members of the NYC ReLeaf Planning Committee and the local professional arboricultural community attended these evening meetings, *gratis*, to produce a specification for the replacement initiative. The resulting specifications were submitted to the NYC Department of Parks. The planning body also provided *gratis* replanting oversight to ensure the specification deliverable.



- **A Beetle Buster Patch Program for Brownie, Junior, Cadette and Senior Girl Scout Troops** Earned with Beetle Buster training, design and assembling of 25 ALB Preferred Host Herbaria for the 25 original Toolbox recipients plus ALB awareness activities in quarantined communities.

The Patch Program component was realized entirely through donated services and it was the partnership that made the deliverable possible:

- given that the quarantine was in both Brooklyn and Queens, Brooklyn and Queens Botanical Gardens were approached and offered host species materials, classroom space and herbarium supplies;
- the necessary complement of educators needed to train and work with participating Girl Scouts as they constructed the 25 herbaria and conducted ALB awareness activities were from the New York ReLeaf Region 2 Planning Committee plus USDA Forest Service personnel;



- the Girl Scout patch program administrator allowed me to design a unique patch which featured an Asian Longhorned Beetle.



- The “Greenpoint / Williamsburg Counts Trees Because Trees Count” tree inventory. The purpose of the inventory was to determine what tree species still existed within the community, public and private, how many of each species, their condition (professionally rated) as well as the number of available planting spaces for the replacement planting initiative.

A pre-inventory training module for the interested community was developed by myself in collaboration with our USDA Forest Service Urban Forester, Sharon Ossenbruggen. Training was provided by both Sharon and I and facilitated in the field by additional USDA Forest Service personnel along with concerned professionals from the local professional arboricultural community. Materials such as printed Excel-based spreadsheets, DBH tapes and a project T-Shirt for all participants was funded by the USDA Forest Service.

The NYC ALB Public Outreach Program and its very modest funding trained over three thousand people and, through its varied activities, connected directly with tens of thousands of residents. The Con Edison utility bill stuffer mailing reached millions of NYC dwellers, all through donated services. People retained the ALB brochures for years after ALB was no longer in the headlines and, prior to my moving to Switzerland in 2012, would often call me with tree concerns or questions.

It is tragic to see entire planted areas being devastated by some natural or unnatural occurrence but it does not have to remain a tragedy. The negative can lay the groundwork for a massive stakeholder collaboration enabling partnerships and empowered communities.



Greenpoint Tree Corps providing existing street tree care

An important outcome of the Community Board 1 Strategic Plan was the development of a community-based educational endeavor including school curriculum. In addition, the partnerships and informed citizen connections that developed formed a basis for a collaboration that still exists today, realized through advocacy and taking ownership of our trees in their time of need. The Greenpoint community has exemplified that spirit of grassroots stewardship through the Greenpoint Tree Corps program.

While culturally, the US and Switzerland are separated by an Ocean and the programs we created for NYC would probably not work here, the sharing of Best Management practical knowledge in an understandable way and finding appropriate cultural avenues for the dissemination of that knowledge will help you to develop an informed advocacy for the invaluable resource we are working with - our trees and all their associates.

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