



Team members of the Urban and Community Forestry Strike Team in Ottawa Illinois

@ORC

Issue # 78
August 3, 2017

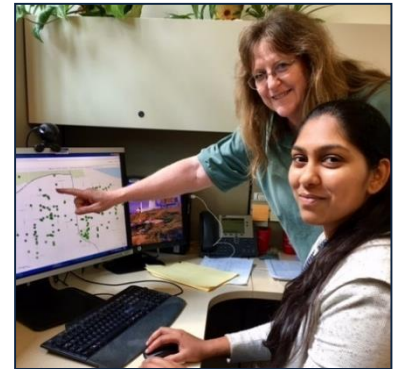
Tree Disaster Strike Team Makes its First Deployment

By: Reinee Hildebrandt and Sravya Pamulapati, Forestry Division

Tornado sirens blared, 155 mph winds sounded like a freight train as the EF3 tornado made an 800 yard-wide path for more than 11 miles through Ottawa on a warm Tuesday afternoon February 28 of this year. People took shelter from the storm as buildings and trees were tattered and twisted. Residents emerged to find their neighborhoods in shambles. Impacted areas included the oldest part of Ottawa and the center of Naplate. What once was a healthy, mature urban forest was a sickened mess in Ottawa. Because of the disaster to the city's trees, Ottawa called the IL Dept. of Natural Resources Urban and Community Forestry (IDNRUCF) Program to request assistance from its strike team.

IDNRUCF Program began giving communities technical assistance to help them develop local municipal forestry programs. Assistance included aspects of building a program that could be ready and respond to a natural disaster. The IDNRUCF program has been helping communities prepare for natural disasters through workshop trainings and distribution of technical resources at the Tree City USA's Annual Conference and Awards Ceremony. This includes helping communities establish local storm-readiness infrastructure. A tree care ordinance is a requirement of the National Arbor Day Foundation Tree City USA program which is administered at the state level by IDNR UCF. The ordinance helps a community put the right policies and procedures in place so if a disastrous storm hits, response will be more organized and less chaotic. Ottawa, a 19-year TCU

This journey toward assistance began in 1991 with expansion of the federal and state urban and community forestry programs. The USDA Forest Service (USDAFS) and



Reinee received her B.S., M.S. and PhD in Forestry from Iowa State University. She has been with IDNR for more than 25 years, serving as the State Urban and Community Forestry Program Administrator. Sravya is a Graduate Student Intern from the University of Illinois-Springfield working for the Urban and Community Forestry Program.

@ORC is a publication by the IL Department of Natural Resources Office of Resource Conservation about exciting and wonderful things ORC staff are doing throughout Illinois.

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community, was fortunate because they had a policy in place to protect their citizens (and their trees) from storm-chasing fly by night chainsaw operators. Per their ordinance anyone who was going to bring a chainsaw business into the city was going to have to register at city hall first.

In 2005, the strike team concept was added to the natural disaster service through federal and state Urban and Community Forestry programs. This concept was started by the USDAFS in the southern United States with Hurricane Katrina. The USDAFS needed a way to get quality forestry expertise to the areas to help save trees from being inadvertently removed or over pruned. With Hurricane Sandy in 2012, the USDAFS added the NE US to the training ground for Urban and Community Forestry Strike Teams.

Illinois became involved in 2013 through a partnership with the Illinois Arborist Association and the USDA Forest Service and IDNRUCF put on its first strike team training. The participants had to be International Society of Arboriculture Certified Arborist or equivalent, complete two FEMA courses, and the USDAFS Strike Team Intuitive webinar before they could be accepted into the week-long field training. The course enabled the team to go into a community



Twisted limb from the February Storm

after a storm to conduct a Level I Rapid Tree Risk Assessment to assist Illinois communities in identifying potential risk associated with storm ridden trees. Twenty-five people received Strike Team Specialist designation after Illinois' training.



Tornado in Ottawa nearly split this tree in half

Initially the strike team members were deployed to FEMA declared natural disasters. Since there were very few FEMA declared events in Illinois, the strike team was all dressed up with no place to go. This seemed to be the case with several states so the 20 state NE USDAFS Region organization of State Urban and Community Forestry Program Administrators. The challenge was on to take the federal model (with their guidance and blessing) and make it a state-level model. Illinois was already working on that concept and stepped forward to provide leadership. John Parry, Northeastern Region USDAFS Urban Forester and Dudley Hartel, USDAFS Southern Region Urban Forester, allied with IDNR to make this happen. The USDAFS provided a grant to Trees Forever to help IDNRUCF with five strike team deployments throughout the Illinois. Trees Forever handled equipment purchases, hotel, food, and transportation logistics for the team.



Severely damaged house from a large tree that fell from the February 28th tornado.

In April, IDNR received a call from Ottawa city officials for assistance from the February 27th tornado. A chain of meetings began to determine the scope of work for the strike team deployment. Mary Kazmarek, GIS Coordinator for the City of Ottawa, worked closely with Charlie Foor, GIS Specialist/Analyst for IDNR, to provide maps to assess, by priority, right of ways (since these varied greatly in the impacted area), and house numbers. Charlie Foor set up the needed maps and worked with Barb Grabner-Kerns, Trees Forever, and Sravya Pamulapati, IDNR Graduate Public Student Intern, to get everything needed for deployment. Sravya also created an Android tablet/i-Pad ARC GIS operations manual for the deployment for both off-line and hot-spot connections. The overall logistics of coordinating the deployment, writing the scope of work and providing the final report was done by Reinee Hildebrandt, State Urban and Community Forester. John Parry, USDA FS agreed to serve as the team leader in the field, a designation for the “Go To” person in the field during the event.

On June 19th, the IDNR, in partnership with Trees Forever, the USDAFS and the City of Ottawa, held the first state-level Urban and Community Forestry Strike Team deployment in the northeast United States. Converging on Ottawa IL were 8 highly trained tree experts called the State of Illinois Urban and Community Forestry Strike Team Specialist. They were there to do a rapid tree risk assessment. The goal was to make sure no hidden dangers were

Left behind. Ottawa City Hall was the headquarters. The first day was logistics - equipment checked out, a refresher course taken, and temporary police Department issued ID badges were secured. The team members used the International Society of Arboriculture’s Best Management Practices and Tree Risk Assessment Qualifications (TRAQ) Protocols. FEMA protocols for assessing trees for removal and pruning were also used, reviewed, and discussed prior to field deployment. The FEMA criteria includes: percent of canopy loss, heartwood exposure, issues with scaffolding and branches, and stumps or root plate failure.



Strike team members compare notes under an undamaged tree

Only public trees with storm related damage were assessed. Private trees could be assessed only if they posed a threat to people or property on the public land. The TRAQ protocols required the professionals to assess the likelihood of failure, the possibility of impacting a target and then the consequence of those two actions.

This data is further analyzed after the deployment at IDNR by Reinee Hildebrandt. The data analysis allows the trees to be put into priority listings based on degree of risk. Those lists are given to the community in a report for their decision-making purposes. During this deployment, there were 167 trees/stumps in Ottawa and 50 trees/stumps identified in Naplate.

The initial deployment of five two-person teams worked remarkably well. IDNR defined the daily focus areas for each team and protocols for where a team would move next if they completed their assigned region ahead of schedule. This meticulous detailing assured that trees would not be assessed twice.

While the Strike Team Specialists work is done once they hand the data to IDNR and return their equipment, the work of the IDNR and its partners is just beginning. The data must be quality checked by IDNR and a report written and given to the community.



FEMA guidelines looks at percent of canopy in determining tree removal potential



Paul D'Agostino collecting data from a damaged tree

IDNR's role doesn't end there. Through the IDNRUCF program, technical assistance is provided throughout the final phase of "Recovery" from a natural disaster. In partnership with Trees Forever, additional technical assistance will be provided to both Ottawa and Naplate to help them recover. We will rebuild a stronger local municipal forest by assisting with aspects of the local program that may need strengthening. Trees Forever will be providing grant funding to help re-plant after a tree inventory is conducted to determine remaining tree diversity.

With hard work and adequate technical assistance, both communities will be able to re-build a more resilient community forest for the future. Building resilient forests in and around where we live and recreate is what IDNRUCF program is all about. The strike team helps IDNR and its partners to reach out to communities by providing professionally based data for their informed decision making. Together, we can maintain the environmental benefits Illinois citizens get from their community trees.

