



# 2011 Young Tree Care Survey Report

Compiled by Michael Hawkins, Program Director

*Because trees are a critical element of a livable, sustainable urban environment, Canopy's mission is to educate, inspire, and engage residents, businesses, and government agencies to protect and enhance local urban forests.*

## **1. Introduction:**

**Canopy is a nonprofit organization working to promote a healthy urban forest by educating, inspiring and engaging the community in the stewardship of young and mature trees.** The Young Tree Care Program was created to address these goals. The Young Tree Care Survey is a component of this program, and seeks to educate homeowners on the proper care of young trees and to notify the City of Palo Alto of any problems with young street trees that need to be addressed, and to engage community volunteers in the process. Young street trees are on the front line of our urban forest. They must tolerate the harshest urban conditions and yet, once established, provide some of the greatest benefits to our city and residents.

**The Young Tree Care survey takes place in the summer months and surveys most street trees planted in Palo Alto by the City and by Canopy in the past five planting seasons.** The Canopy Young Tree Care Survey began as a pilot project in the summer of 2001 and expanded into a citywide program in 2002. At each address surveyed, information is left with homeowners on the proper care for young trees. Results from the survey are compiled and shared in a detailed report to the City's Public Works Department so they can take action on trees in need of care. Results of the survey will also be posted on Canopy's website, [www.canopy.org](http://www.canopy.org).

## **2. Evaluation**

**We surveyed a total of 735 trees.** While this is not the total number of street trees planted by the City this year as we do not survey the median trees, the declining trend is a reason for concern.

**"Needs Water" decreased significantly from 41% to 32%.** This drop is most likely due to this year's mild summer. Lack of water has always been the biggest challenge facing young trees in the urban environment. Residents often don't realize that the city counts on them to water street trees at their residence. Canopy's "Thirsty Tree" postcards, the tree care brochure left on the homeowner's porch during the survey and the "Is Your Tree Thirsty?" banner are raising awareness about tree care specifically the need to water during the first few summers.

**"Root Flare no longer visible" increased to 9%, for a total of 63 trees.** This may be due to an emphasis put on this in our training demonstrations, but should be looked into further, as leaving a tree planted too low in the ground can severely limit its chances of survival.

**"Suckers need to be pruned" dropped from 7% to 2%.** While I am uncertain of the cause of this drop, the need to remove suckers from young trees is not critical, and in some cases leaves the trunk bare and susceptible to sunburn.

**"Stakes Need to be Removed" has dropped significantly from 19% to 8%.** My guess is that there has been an effort by City staff to remove stakes where they are no longer needed. If this is the case, Canopy is thrilled to see this and other young tree care is being done.

**The percentages of trees that need to be re-staked/re-strapped, need structural pruning remains low.** The information provided by Canopy to the city's tree crews through the volunteer survey and the increased diligence of Palo Alto's Tree Dept. have greatly improved the maintenance of street trees. This improved care will help encourage strong tree trunks and better form in the young trees. The tree care brochure and general community awareness also encourages residents to take a proactive approach in the care of their street trees.

**Canopy continues to look at ways to improve the tree care survey.** Next year we will use the recently produced Young Tree Care Survey Video to uniformly train volunteers uniformly. While we are encouraged that the number of positive comments about trees continues to rise, we realize that these comments are anecdotal. We are looking into creating a simple and reliable rating system to obtain an overall assessment of how well these young trees are doing. We will continue to work with the Tree Section to make sure we are meeting their needs. We hope to organize follow-up volunteer work events to assist the City with any tree maintenance they may need, particularly mulching young trees. We will continue to work on improving and streamlining the Young Tree Care Survey. Any comments or suggestions by Surveyors, City Staff, or the community at large are much appreciated. Please contact me at [michael@canopy.org](mailto:michael@canopy.org).

### **3. Methodology:**

**The Young Tree Care Survey is a volunteer-based effort.** This year we recruited 60 volunteers for our surveys. Over 172 volunteer hours and many staff and paid youth staff hours were required to complete the survey. Our volunteers represented a broad cross-section of the community, including high school students, college students, retired community members and local community or corporate groups. This year we were thrilled to engage folks involved in the planning of the California Avenue planting in the surveying and care those trees. Actively involving residents in the care of and enjoyment Palo Alto's Urban Forest is a major part of our mission and the Annual Young Tree Care Survey is a major element in reaching this goal.

**Canopy's Youth Staff employment program plays a key role in completing the survey.** Our summer intern and youth employees (ages 16-20) were given leadership roles and teamed up as mentors with the younger student volunteers.

**The City of Palo Alto Geographic Information System (GIS) used TreeKeeper data to create route maps, info tables and print large-scale maps of all trees and routes.** This step helps streamline volunteer survey time. The list of young street trees was downloaded from the City's TreeKeeper database into a spreadsheet and sent to City GIS specialists. Thank you once again to Dave Matson and Marta Seone. A GIS layer was created with the trees marked by tree symbols and a large map was printed. Survey routes were hand-drawn on the large map with for a total of 45 routes.

**Canopy's summer intern, Darryl Sepulveda, worked with Marta Seone in the City's GIS dept. to draw and label polygons around the trees of each route and print individual route maps.** The polygons were also used to create tables with the address, location, tree species and date planted for the trees on each route.

**The TreeKeeper data was also used to create pre-printed survey forms and personalized brochure labels for each route.** The survey form divides the possible problems a tree may have into responsibilities of the homeowner and responsibilities of the City. These steps increase efficiency and reduce the possibility for errors by our volunteer surveyors.

**Our color "Young Tree Care" brochure with tips on watering and protecting young trees, information about the value of the urban forest and a personalized survey form to educate residents, was distributed to each residence surveyed.** Volunteer surveyors completed brochures with survey information related to the young trees urgent needs and included notes to encourage resident attention to the trees. The personalized brochure was left at the door of each residence and additional blank brochures were handed out to residents that approached volunteers with questions about trees or the survey.

**Each survey team was provided with a clipboard, red pen, individual map of their route, a table with tree info details, pre-printed survey forms for the trees on the route, pre-labeled brochures for each residence and soil moisture probes.** Volunteers were trained, divided into teams and assigned routes that could be completed within a 2-3 hour span. **A total of 735 trees were surveyed.** Most of the surveys were completed during our scheduled survey dates of July 9, July 1, July 20, and our Cal Ave survey on August 15. Experienced survey volunteers and youth staff completed the remaining surveys in teams throughout the summer. Most of the surveys were completed in the months of July and August, with a handful finished in September.

**Volunteers performed first care on young street trees again this year.** In addition to marking the survey form, whenever possible, volunteers weeded around the base, removed suckers and cleared the root flare of young trees. This step gives volunteers a chance to do some hands-on tree care, contributes immediately to the health of the trees and by spending a little extra time at some trees, saves the city from a large cumulative maintenance project.

**The “Is Your Tree Thirsty?” campaign accompanied the survey, including our 20’ banners posted prominently throughout the summer at El Camino Field and at the train overpasses of University Ave and Embarcadero Rd. We also sent a watering reminder postcard to each residence where a tree has been planted in the last 5 years.** We received multiple comments and questions regarding our banner with web address and link to summer watering and tree care tips. The banner was highly visible to residents of Palo Alto, Stanford, Menlo Park and all travelers along each busy street. Postcards were sent in June, before the summer survey, to all addresses with young street trees. Postcards also contain information on proper watering needs and our web address for more information.

## **1. Conclusion**

**The health and vitality of the City of Palo Alto depends on maintaining a healthy urban forest. Our urban forest canopy draws people to our community and contributes to our quality of life.** Trees are looking very good according to the increased number of positive comments by tree surveyors. This is another testament to the awareness that has increased as a result of the survey and resident outreach, as well as the City’s ongoing attention to street trees. Canopy’s Young Tree Care Survey involves the community to make sure that young trees survive and our urban forest will be maintained into the future. This has become of increasing importance as our street tree canopy matures, annual removals rise beyond annual plantings and our city tree crews are stretched thin. Educational outreach, which brings increased awareness and appreciation of our city trees, is a very important component of this program and we are seeing the results. Understanding the biggest problems that we face with our city trees through the Young Tree Care Survey will help us shape our programs in the future to better meet tree needs. Again, if you have any questions or recommendations on how the Survey can be improved send an email to [michael@canopy.org](mailto:michael@canopy.org).

A listing of trees and their corresponding problems has been provided separately to the Public Works Department so that the department may schedule maintenance accordingly and attend to the trees most in need. Table 2 (following on page 6) compares this year’s results to previous years. For each year, both the total number of trees and the percentage with each problem is shown.

Table 2: Canopy 2011 Young Tree Care Survey – Problems reported

	2008	%	2009	%	2010	%	2011	%
Trees Surveyed	932		905		890		735	
Needs water	399	43%	314	35%	362	41%	233	32%
Needs mulch	264	28%	315	35%	232	26%	175	24%
Needs weeding	122	13%	138	15%	106	12%	88	12%
Lawn or other competing plants	136	15%	116	13%	133	15%	119	16%
Mechanical damage or injury	17	2%	31	3%	13	1%	32	4%
Needs basin re-building	35	4%	51	6%	90	10%	71	10%
Suckers need to be pruned	84	9%	57	6%	61	7%	17	2%
Needs to be re-staked	27	3%	22	2%	36	4%	21	3%
Needs to be re-strapped	13	1%	17	2%	22	2%	25	3%
Stakes need to be removed	165	18%	165	18%	172	19%	56	8%
Root flare no longer visible	48	5%	47	5%	46	5%	63	9%
Needs pruning (major)	21	2%	22	2%	27	3%	22	3%
Tree is dead or dying	12	1%	5	1%	12	1%	4	1%
Weeded Today	41	4%	49	5%	22	2%	33	4%
Suckers Pruned Today	63	7%	43	5%	6	1%	6	1%
Root flare cleared today	31	3%	23	3%	9	1%	14	2%
Positive comment left about tree	334	36%	388	43%	335	38%	410	56%