

URBAN FOREST CONNECTIONS

webinar series

Urban FIA: Bringing the nation's forest census to urban areas

Wednesday, September 9, 2015 | 1:00 – 2:15pm ET

Q&A

Cara Boucher: Are the urban plots in the base grid (1/6000 ac) on schedule to be inventoried with the yearly 'rural' panels or are the only urban FIA plots being scheduled in target cities?

Answer: Our goal is to have the Urban FIA plots on the same cycle length as the CORE FIA plots. If the CORE program is on a 7 year cycle in a specific state the urban program will also be on a 7 year cycle.

Once a target city and its associated Core-Based Statistical Area (CBSA) are initiated all urban plots on the base grid within the study area will be scheduled for completion with the yearly rural scheduled plots. Urban areas outside the target city CBSA will be initiated at a later date once the urban program expands.

- 2016 – Wisconsin plans to expand past their two target CBSAs to cover all urban areas within the state.
- 2016 – Vermont plans to start their target CBSA, as well as all of their urban areas.
- In both cases rural and urban inventories will share the same cycle length.

Ken Holman: Data is collected for both public & private lands. Can that data be summarized separately? I.e. for public OR private lands?

Answer: Yes, it can.

Patricia Joyner: Alaska and Hawaii were not on any of the U.S. maps. Is that because those states will not be able to participate or just because you don't have a map with those states?

Answer: Yes, all areas that are covered by the CORE program will be covered, including all 50 states as well as most of our affiliated islands.

Gary Lovett: Will the urban FIA be sufficient for surveillance for invasive forest pests?

Answer: Similar to traditional FIA methods, the urban FIA inventory will include the collection of data relevant to analyses of invasive forest pests. There will be data on the numbers and distribution of host trees, data on tree damages including evidence of certain types of defoliation when damages reach a certain threshold, crown data (including dieback and foliage absent), and mortality and cause of death data. The determination of whether these data will be “sufficient” is largely a function of the sample size and the variability of the metric being considered. The urban inventory includes an intensification of plots within the target city and it is likely that our tree estimates within the city will be improved over traditional FIA.

Guy Robertson: What would it take to extend urban FIA to rural areas and develop wall-to-wall coverage enabling national estimates of cover, carbon sequestration, etc., or regional estimates of invasives? Would this be feasible?

Answer: Sure, I think it would be feasible, but it would take a considerable amount of funding. It is important to keep in mind that both CORE and Urban FIA are fulfilling directives set forth in the Farm Bill and that is why our focus has been expanded from forest land to include urban areas.

Paul Stacey: Could you speak to the "full array of benefits" in the context of what ecosystem services are NOT provided or restored in urban areas (runoff mitigation, soil health, habitat, water purification are all pretty minimal) that exist in more natural or managed forests? And, conversely, there are risks from urban forests – costs of falling trees, fire risk, maintenance of trees, introduction of invasive species/disease – have they been assessed as tradeoffs for cost, pollution, and energy use?

Answer: Good point that the ecosystem services trees provide in urban settings may be different from those that trees provide in more natural settings. And it is true that there are risks associated with trees in urban settings. Although Urban FIA is not necessarily a cost/benefit analysis, the information that Urban FIA is developing can be used to inform such analyses. While an acre of urban forests may not provide the same amount or level of a specific benefit as an acre of rural forest, it could be the case that what the urban forest does provide is critical for the very reason that there is minimal amounts of that specific service in an urban setting. The Urban FIA program is using i-Tree models to estimate ecosystem services. As new research highlights additional services and risks associated with urban trees, the i-Tree program will likely expand to include new

models. Urban FIA data will also provide a continuous stream of quality urban forest data that can be used as input data to new models and analyses any researcher might develop, including an analysis of the tradeoffs of benefits and risks. It also might be interesting to note that there are some folks in the core FIA program who are interested in developing ecosystems services models for use with “rural” FIA data – a “rural” version of i-Tree which might serve to highlight some of the differences you mentioned.

Guest: How large are the plots?

Answer: Each plot is a 1/6 acre, consisting of one 48’ fixed radius subplot and four 6.8’ radius micro plots.

Reinee Hildebrandt: Where the FIA plots in the city originally in the city or did the city grow around or into some rural/traditional/core plots?

Answer: The plots have always been in place, and in some cases these plots have become more urbanized. The main change here is that our focus has expanded beyond forest land to all lands within the urban foot print. Our base grid of plots (1 plot / 6000 acres) covers the entire country. In the past we only sent field crews to take field measurements if we believed there was a potential to encounter FIA defined forestland. Now, through the Urban FIA program, all plots falling within census defined urban areas will receive a field visit, regardless of the potential of encountering FIA defined forest land (assuming there are some trees or vegetation present).

Guy Robertson: So "rural" is traditional FIA, right? But any plans to sample agricultural lands or other lands that have trees but do not meet FIA forest definition?

Answer: Correct, “rural” or “CORE” are the traditional FIA.

We will encounter and measure some agricultural lands that do not meet the FIA forest land definition IF they happen to fall within areas defined as urban areas. At this point the Farm Bill has directed us to expand to urban areas and by doing so I believe FIA is able to start laying the infrastructure down to move onto an all tree, or an all veg inventory IF some future Farm Bill directed us in that direction.

Guest: How accurate is your private sector data? Are residents trained to measure and record? Do you go out and do that data collection?

Answer: Our standards are the same on both public and private lands.

Residents are not trained to measure and record. We have a mix of federal, contractor, as well as state and local cooperators that have been certified to collect data.

Rachel GZ: Really fantastic presentation. I know Mark mentioned to get in touch with a local FIA representative to become a partner but I have had little success in receiving correspondence from those folks. Is there another way to become involved? Can we email you?

Answer: Sorry to hear that. Please call the number listed in the presentation for a local contact. If you run into problem please contact me: mmajewsky@fs.fed.us.

Rachel GZ: It would be great to have something to be able to present to budget committees etc. to sell the program, so to speak. Does anything like that exist?

Answer: Please take a look at the documents on our [Urban FIA website](#). If you don't find what you are looking for, let me know specifically what data you are interested in: mmajewsky@fs.fed.us.

Jeffery Treu: Are the sample plots the same size in urban and rural areas? If not, why would they be different sizes? Thanks for the topic!

Answer: Both are 1/6 acre samples, but the foot print is different: four 24' fixed radius subplots in rural versus one 48' fixed radius subplot in urban areas. The difference is due to time and money. We found that we were spending as much, or even more time tracking down and speaking with landowners using the rural footprint and chose the new urban foot print in order lessen the number of landowner contacts that need to be made to complete each plot.

Lissa Martinez: Can you please speak to the Citizen Science opportunities? Here in Texas, I would love to engage the Master naturalists across the state.

Answer: We require all of our data collectors to be certified, as well as to continue to pass periodic check plots where their data is evaluated. If such requirements are met I think we would at least be able to consider the possibility. That being said, it has been my experience that it is normally cost prohibitive.