Wildlife Conservation in Cities and Suburbs: Research, programs, and tools

Wednesday, March 11, 2015 | 1:00 – 2:00pm ET

Q&A

Dana Coelho, USFS: In light of climate change and other changes in the landscape, what kind of planting recommendations in addition to "native" can we be making for urban trees and understory vegetation?

Susannah Lerman: In terms of general, one of the challenges of planting in these urban areas is trying to first of all figure out which plants can actually survive in some of these really poor soils. And I think, compounded with that, the fact that climate change is really coming in and really changing the species, I think that’s probably a really important line of research that we’re starting to think about, so we can address that. But I think in terms of trying to really focus on native plants and then maybe the next step is noninvasive plants.

David Mizejewski: I would echo that. And what I was going to say is I think this is an area we need a lot more research in. The National Wildlife Federation is doing a lot of work on climate change adaptation, but it really is focused more on wilderness areas and not in the urban sense, and certainly not in the urban forest sense. So I would say that it is a great question and we need more study and research to be able to provide those recommendations.

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Nancy Lawson: What's a good way to help homeowners and city managers in urban areas to keep dead and dying trees? It's easy if you have a 2-acre property in the suburbs – but how can we help folks do it elsewhere?

David Mizejewski: Our suggestion at NWF is always to say this – we teach people about the really important value of dead and dying trees for wildlife and that if we can keep those things in the landscape, we’re going to be doing a good service to the wildlife. But with the caveat, the very big caveat, that it needs to be a dead or dying tree that is not
posing any danger to person or property. We do recommend calling in a certified arborist or other tree care professionals and communicating that you want to keep these things for the wildlife, but that you want to do it in the way that is going to minimize any potential dangers. Just like the wasps nest, there are times when you just have to take them out. And that's okay. We also try to teach people, don't beat yourself up over that. But maybe if you do have to cut down a dying tree, maybe you can keep the trunk of it and create a brush pile or fallen, woody debris instead of having it standing up and that's also going to be great wildlife habitat, as well.

Susannah Lerman: I will echo with David just said. And I think some of the work we're also doing up at UMass is working with an arborist in trying to link these cavities for wildlife with a hazard grading. A lot of times, a lot of the trees that are dead and dying are removed even though they don't necessarily pose a really strong risk to either human health or property. So I think, again, working with an arborist and really trying to assess the actual hazard of that particular dead and dying tree can really help with your management decisions.

David Mizejewski: I would add, too, that opportunities like this where we have a dialogue with you guys – I saw a lot of you were urban foresters and maybe even arborist in the poll in the beginning – to be able to have the opportunity to talk and share some of the data from the wildlife perspective so that you guys can be better informed and armed with knowledge when you go out and get some of these questions. So like I was showing in that slide comparison about how we make decisions about the urban landscape, I think we need to – I think we're all trying to diversify how we think about how we manage the landscape so it's not just about Right Tree, Right Place, regardless of whether it's native or not, or the wildlife species, or whether it has a dead branch or not, but it's sort of all of these things. And I think we are still working on that. I think we collectively need to come up with better models that address all these things so that we can all use them as tools for making these kinds of decisions.

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Melanie Pollard: What resources are there to help educate urban citizens on the importance of building around our trees rather than clear cutting?

Susannah Lerman: I don't know of any specific research, but the Sustainable Sites Initiative [http://www.sustainablesites.org](http://www.sustainablesites.org) provides guidelines on how to assess the sustainability of a site at three different stages: planning, building and management. There are a number of different guidelines a builder / landscaper must adhere to in order to obtain 'sustainable' status. This program is modeled after LEED certifications for buildings, but focuses on landscapes. Disrupting the site as little as possible will garner more points. This might provide a starting place for educating citizens. Many principles in Conservation Developments (CD) somewhat address this issue as well, and a CD requires a site assessment including the habitat potential, drainage, and soil properties, which are all compromised when a site is bull-dozed for the placement of
one house. I’m working with a team at Colorado State University to develop more cohesive guidelines for CDs. Stay tuned!

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CWH1: How do we create regional best practices? Native bees rarely use lawn flowers in the Southwest!

Susannah Lerman: many local organizations have extensive plant lists suitable for that particular region and these resources can be integrated into best practices. Organizations that come to mind are Audubon, The Nature Conservancy, extension agencies, and local land trusts. Also, sometimes best practices are not implemented for a variety of societal reasons (e.g., cost, social norms, expertise), and so being aware of some of these challenges is important to ensure a higher likelihood of implementing the best practices.

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CWH1: In Southern California many cities are moving away from large native shade trees for streets and parks. How do we work with local agencies to raise their literacy on these issues?

Susannah Lerman: As far as raising literacy on the value of large native shade trees, I think working with the public and gaining their support for native trees is a start. Also, articulating the goals for tree planting is important. For many arid cities, shade trees provide much needed relief from the relentless high temperatures, especially in underserved neighborhoods. At least in Phoenix, many of the large shade trees are not native so there is a trade-off between wildlife habitat (native trees support more native birds) and other ecosystem services (the dense greenery can significantly reduce temperatures, which is vital, especially for residents lacking air conditioning).

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Melanie Pollard: Where can we find good stats on data that measure the value of trees in the urban environment- oxygen, insects, birds, water, etc?

Susannah Lerman: Much of Dave Nowak’s work with i-Tree and the associated publications start to quantify the ecosystem services and values of the trees. Some of my work in Phoenix, AZ quantifies the value of trees, by parsing out native and non-native plants, and how desert birds respond. In sum, more desert trees and shrubs support more desert birds (Lerman and Warren 2011, Ecological Applications).

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