**Putting the Green in Green Infrastructure Resources**

Shannon Currey, Hoffman Nursery and Debbie Hamrick, NC Farm Bureau Federation

**The benefits of plants**

* **Neighborhood greenspace and health in a large urban center**  by [Omid Kardan](http://www.nature.com/articles/srep11610), P[eter Gozdyra](http://www.nature.com/articles/srep11610), [Bratislav Misic](http://www.nature.com/articles/srep11610), [Faisal Moola](http://www.nature.com/articles/srep11610), [Lyle J. Palmer](http://www.nature.com/articles/srep11610), [Tomáš Paus](http://www.nature.com/articles/srep11610) and [Marc G. Berman](http://www.nature.com/articles/srep11610) in *Scientific Reports* , Article number: 11610 (2015) doi:10.1038/srep11610
* **NASA Finds Vegetation Essential for Limiting City Warming Effects** NASA press release <https://www.nasa.gov/feature/goddard/vegetation-essential-for-limiting-city-warming-effects>
* **University of Leicester scientists model impact of green infrastructure on City Centre traffic pollution** University of Leicester press release <http://www2.le.ac.uk/offices/press/press-releases/2016/november/university-of-leicester-scientists-model-impact-of-green-infrastructure-on-city-centre-traffic-pollution>
* **Carbon Dioxide Reduction through Urban Forestry** Pacific Southwest Research Station Technical Report <https://www.fs.fed.us/psw/topics/urban_forestry/products/cufr_43.pdf>
* [**More exposure to vegetation linked with lower mortality rates in women**](http://www.hsph.harvard.edu/news/press-releases/plants-death-rates-women/) Harvard T.H. Chan School of Public Health. [**Exposure to Greenness and Mortality in a Nationwide Prospective Cohort Study of Women**](http://ehp.niehs.nih.gov/wp-content/uploads/advpub/2016/4/ehp.1510363.acco.pdf) by Peter James, Jaime E. Hart, Rachel F. Banay, and Francine Laden in *Environmental Health Perspectives* DOI:10.1289/ehp.1510363
* **Trees, a new partner in the fight against urban crime** <http://blogs.lse.ac.uk/usappblog/2015/11/20/trees-a-new-partner-in-the-fight-against-urban-crime/?utm_content=25407037&utm_>
* **General Services Administration statistics on US Coast Guard Headquarters** landscape performance, from a presentation by Christian Gabriel, GSA, NC Green Industry Council Water Symposium June 18, 2019, Raleigh, NC. Also see, **Greening Federal Buildings** <https://www.gsa.gov/governmentwide-initiatives/sustainability/greening-federal-buildings>
* **Benefits of restoring ecosystem services in urban areas**, (2015) by Elmqvist, T.; Setala, H.; Handel, S.N.; van der Ploeg, S.; Aronson, J.; Blignaut, J.N.; Gomez-Baggethun, E.; Nowak, D.J.; Kronenberg, J.; de Groot, R. in Current Opinions in Environmental Sustainability. 14: 101-108 an open paper on ScienceDirect.
* **Landscape Performance Series** by the Landscape Architecture Foundation <https://www.landscapeperformance.org/>
* **Resources available regarding the benefits of plants, gardens, and improved landscapes f**rom the Ellison Chair in Floriculture at Texas A&M <https://ellisonchair.tamu.edu/benefitsofplants/>
* **#PlantsDoThat** infographics and picture memes developed by the National Initiative for Consumer Horticulture showing the benefits of plants based on scientific evidence. <https://consumerhort.org/>
* **Sustainable Sites Initiative**® –SITES® administered by Green Business Certification Inc. Adopted by the General Services Administration (GSA) for new federal construction and renovation projects [http://sustainablesites.org/ [sustainablesites.org]](https://urldefense.proofpoint.com/v2/url?u=http-3A__sustainablesites.org_&d=DwMFAg&c=5hkJ0ogNeD844ebdJTIAq6EW_TklNASZynED2mnf_tQ&r=1zrc_UPByrXX9AuM4fF94ZEE5fqxLth_t31GP4emdgc&m=uLqp3B1RbggQmRpcwJ9PWU7aaL8aahqQ7WXptPOOYX4&s=2oLbmfBjiq0rFgIrOnAaJXV9F6InmeXL6SjLLcrovGo&e=)
* **Lady Bird Johnson Wildflower Center Ecological Design section** [http://www.wildflower.org/our-work/ecological-design [wildflower.org]](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.wildflower.org_our-2Dwork_ecological-2Ddesign&d=DwMFAg&c=5hkJ0ogNeD844ebdJTIAq6EW_TklNASZynED2mnf_tQ&r=1zrc_UPByrXX9AuM4fF94ZEE5fqxLth_t31GP4emdgc&m=uLqp3B1RbggQmRpcwJ9PWU7aaL8aahqQ7WXptPOOYX4&s=t22sOlMqNbk5VIT93xkuWPOwm-GydxCPb28aROhuag4&e=)

**It’s about the right plants for your project**

* **Tree Species Suitability to Bioswales and Impact on the Urban Water Budget**, Scharenbroch, Bryant C.; Morgenroth, Justin; Maule, Brian, Journal of Environmental Quality by the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, Inc., <https://dl.sciencesocieties.org/publications/jeq/abstracts/0/0/jeq2015.01.0060> **Doubly Green Trees**, Soil Science Society of America blog post by Susan Fisk:  <http://www.soils.org/discover-soils/story/doubly-green-trees>
* **Remediation of Urban Stormwater Pollution** **by Three Different Filter Bed Substrates and Plant Effectiveness in Pollution Sequestration**, Rebecca Pledger, Master’s Thesis (2012) <https://repository.lib.ncsu.edu/handle/1840.16/8213>
* **Hoffman Nursery** website: [https://hoffmannursery.com/ [hoffmannursery.com]](https://urldefense.proofpoint.com/v2/url?u=https-3A__hoffmannursery.com_&d=DwMFAg&c=5hkJ0ogNeD844ebdJTIAq6EW_TklNASZynED2mnf_tQ&r=1zrc_UPByrXX9AuM4fF94ZEE5fqxLth_t31GP4emdgc&m=uLqp3B1RbggQmRpcwJ9PWU7aaL8aahqQ7WXptPOOYX4&s=necQIBq1ZPqSxjN-tFa4tcoWpburnf-S3lL7SGr1swI&e=)
  + View the Hoffman Nursery catalog: [https://hoffmannursery.com/view-catalog [hoffmannursery.com]](https://urldefense.proofpoint.com/v2/url?u=https-3A__hoffmannursery.com_view-2Dcatalog&d=DwMFAg&c=5hkJ0ogNeD844ebdJTIAq6EW_TklNASZynED2mnf_tQ&r=1zrc_UPByrXX9AuM4fF94ZEE5fqxLth_t31GP4emdgc&m=uLqp3B1RbggQmRpcwJ9PWU7aaL8aahqQ7WXptPOOYX4&s=8KKdjQmc91zO6r-_W7uGJxM_zWhHExU3IYlrEtIxubo&e=)
* **NC Stormwater Design Manual**
  + **Stormwater Wetlands**: [https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-4--Stormwater-Wetland-11-20-2020.pdf [files.nc.gov]](https://urldefense.proofpoint.com/v2/url?u=https-3A__files.nc.gov_ncdeq_Energy-2520Mineral-2520and-2520Land-2520Resources_Stormwater_BMP-2520Manual_C-2D4-2D-2DStormwater-2DWetland-2D11-2D20-2D2020.pdf&d=DwMFAg&c=5hkJ0ogNeD844ebdJTIAq6EW_TklNASZynED2mnf_tQ&r=1zrc_UPByrXX9AuM4fF94ZEE5fqxLth_t31GP4emdgc&m=uLqp3B1RbggQmRpcwJ9PWU7aaL8aahqQ7WXptPOOYX4&s=J2LQ2-iK2ESIB5MbHX8haCKHjlqOgfUWqH5mwNadAgo&e=)
  + **Bioretention Cells**: [https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-2--Bioretention---11-20-020.pdf [files.nc.gov]](https://urldefense.proofpoint.com/v2/url?u=https-3A__files.nc.gov_ncdeq_Energy-2520Mineral-2520and-2520Land-2520Resources_Stormwater_BMP-2520Manual_C-2D2-2D-2DBioretention-2D-2D-2D11-2D20-2D020.pdf&d=DwMFAg&c=5hkJ0ogNeD844ebdJTIAq6EW_TklNASZynED2mnf_tQ&r=1zrc_UPByrXX9AuM4fF94ZEE5fqxLth_t31GP4emdgc&m=uLqp3B1RbggQmRpcwJ9PWU7aaL8aahqQ7WXptPOOYX4&s=UOuJYAk6LrfNrODuUb6MvTa2f1DZU8earg2EOfm6zBo&e=)
  + **Vegetation section** <https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/A-3%20%20Vegetation.pdf>
  + **Areas of Research Needed** <https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/A-0--Areas-of-Research-Needed-20190815.pdf>
* **NWPL - National Wetland Plant List** <http://wetland-plants.usace.army.mil/nwpl_static/v34/home/home.html>
* **Mt. Cuba Gardens tests the performance** and wildlife benefits of native plants and native plant selections suitable for the Mid-Atlantic in their trial gardens. At the conclusion of testing a genera, the organization releases a publication with the results summarized here: <https://mtcubacenter.org/research/trial-garden/>

**Working with the plant industry**

* **National Green Infrastructure Certification Program**, now by EnviroCert International [wecare@envirocert.org](mailto:wecare@envirocert.org)
* **Chesapeake Bay Landscape Professional** <https://cblpro.org/>

**Other resources**

* **Ecological Landscape Alliance** <https://www.ecolandscaping.org/>
* **The Nature of Cities** <https://www.thenatureofcities.com/>
* **The Conservation Subdivision** <https://edis.ifas.ufl.edu/topic_series_conservation_subdivisions> and other ecological landscape practices by Dr. Mark Hotstetler, University of Florida <https://edis.ifas.ufl.edu/topic_a90394950>