

HUMAN DIMENSIONS OF THE URBAN FOREST & URBAN GREENING Fact Sheet Number 23

### CREATING CHANGE WITH SCIENCE

## Urban Forestry Innovation & Adoption: Connecting to Professionals

#### SCIENCE FACTS FOR KEY INDIVIDUALS

Research provides extensive facts and figures about how the urban forest improves infrastructure function and makes cities and towns more livable.

Local government must plan and manage for green infrastructure, including urban forests, in order to attain these benefits. Adoption of sustainability innovations is dependent on the attitudes and actions of key individuals.

How do we identify and reach out to key individuals in local government - the people who can act for change within their organizations? This fact sheet provides some ideas, based on social science research.

#### SOCIAL CONNECTIONS FOR INNOVATION

There are well-documented conditions and practices that promote the diffusion and adoption of innovations. Social systems are essential to the innovation process. A system is defined as a "set of interrelated [individuals] that are engaged in joint problem solving to accomplish a common goal."

Delivering science within an innovation social system will be more effective if carefully planned. Better communications and outreach about the functions and benefits of trees involves several strategies.

Rogers, E.M. 2003. Diffusion of Innovations, 5<sup>th</sup> Edition. NY: Free Press. Wenger, E. et al. 2002. Cultivating Communities of Practice. Harvard Press.

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One or more **Communities of Practice** (CoPs) might be the outreach target. CoPs are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.

Communications can be targeted to any professional CoP, such as planners, engineers, or city administrators. Each CoP has unique values, standards, best practices, and jargon.



# are some people more inclined to adopt urban forestry policy and practices?

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Individuals will differ in both openness and readiness to integrate new information and practices in their work. People who market retail products do a careful analysis of buyer populations. Sharing science in local government could involve a similar process, so that the right messages are delivered to the right people. First, one identifies the communities of practice that are of interest. Then, an informal assessment of key individuals could center on two traits: innovativeness and professional competency.



#### **INNOVATIVENESS INCLINATION**

Certain people are more prone to consider and adopt innovations than others. Studies note a consistent distribution of attitudes.



**Innovators** are most willing to try something new, but **Early Adopters** are more influential in their endorsements of new ideas. They try out new things in a reasoned way, and often bring credibility to a new effort. In behavior and conversation they are **opinion leaders**.

Who might *not* respond well to information about innovations? **Late Majority** individuals are often skeptical, and will use new ideas or product only after seeing that many others have preceded them.

**Laggards** are critical about new ways, and are traditional in outlook. They are the last to embrace change, and prefer the "old ways." Appeals to such folks will result in little change.

College of the Environment, University of Washington PROJECT CONTACT: KATHLEEN WOLF, PH.D. e-mail: kwolf@uw.edu web: www.naturewithin.org

#### **PROFESSIONAL COMPETENCY**

The detail and complexity of science-based outreach might also be tailored to the level of expertise of key individuals. Any community of choice includes people who range in competency and qualifications.

Reaching a **novice** as he or she works to become more competent may set up a younger person to understand and promote green infrastructure throughout a career.

Providing information to those who are **competent** and **proficient** can help with

Novice: awareness of, familiarity, inquiring	f
Advanced Beginner:	ner:
understanding basics	asics

Competent: ability to do, routine tasks OK

Proficient: excellence, fluency, provide training

Expert: finesse, leadership, influence

implementation of urban forestry once an organization decides to adopt a new practice or program.

> While urban forestry may be new to an **expert** planner or engineer, such people can have much influence within and beyond their workplace.