

URBAN COMMUNITY ECOSYSTEMS

A National Action Plan

United States Department of Agriculture
Cooperative State Research, Education, and Extension Service

Introduction

This action plan was commissioned in April 1994 by the Program Leadership Committee (PLC) of USDA-Extension's Committee on Organization and Policy (ECOP). The purpose of the plan is to guide and coordinate the Cooperative Extension Service's nationwide efforts in urban and community ecosystems education. It contributes to the CES strategic plan for natural resources and environmental management and complements "The Forest Where We Live," a strategic plan of the U.S. Secretary of Agriculture's National Urban and Community Forestry Advisory Council.

The Urban Ecosystem Action Planning Team (UEAPT) was selected via a call for nominations to Extension Directors and Administrators. Nineteen people from eighteen states were nominated. Eighteen of the nominees agreed to serve, and the plan reflects their collective views. The UEAPT report was submitted to PLC in January 1995 and to ECOP in February 1995. Both committees approved the plan and in May 1995 requested a final document.

With the publishing of this document, UEAPT is decommissioned. However, team members possess a wealth of urban ecosystem programming experience and may be called on individually for advice and counsel.

Vision

The Cooperative Extension Service (CES) is a premier provider of education to conserve, restore, protect, and enhance natural resources and ecosystems of urban areas and communities.

Mission

The Urban and Community Ecosystems Program (UCEP) educates and enables diverse audiences to practice informed environmental stewardship and helps communities conserve, restore, protect, and enhance their natural resources and ecosystems in a sustainable manner.

Purpose

This action plan will guide and coordinate CES efforts in urban community ecosystems education. It contributes to the CES strategic plan for natural resources and environmental management and complements "The Forest Where We Live," a strategic plan of National Urban and Community Forest Advisory Council.

Background

Most Americans live in urban and community ecosystems, defined here as all life forms interconnected through the living and physical environments. Humans dominate these ecosystems and are responsible for sustaining them. Although urban and community ecosystems comprise only 2 percent of America's land

area, they are home to over 75 percent of the nation's human population.

Traditionally urban and community ecosystems have been treated as a collection of individual parts and processes, not recognizing the diverse interconnections necessary for a viable, functional, and sustainable ecosystem.

Human communities are made up of diverse people, many of whom are involved with interrelated institutions, such as schools, governments, and formal and informal organizations. Human communities may be defined by geographical boundaries or by a group of people who share beliefs, heritage, or circumstances. A community may be a city, town, village, neighborhood, block, or even an apartment building where residents see themselves as a community with shared goals and interests. People may view their town or city as an administrative unit but feel closer affiliation with residents of their block or neighborhood, giving rise to multiple communities within a town and communities within communities. UCEP must be sensitive to the diversity in human communities to ensure participation of all and to provide effective educational programming.

The nation's quality of life depends on how well citizens understand, appreciate, and manage the interrelationships among people and other components of the ecosystems.

Actions Needed

Five key educational actions related to urban and community ecosystems can guide efforts to shape the future. To address these five educational actions, strategies are proposed for working toward defined goals. These strategies should be adapted to the situation in each state, recognizing interests and activities of clientele groups and opportunities for collaboration with other organizations.

Educational Action I:

Build Awareness and Understanding of Urban and Community Ecosystems

Goal 1:

Promote recognition and understanding of urban and community ecosystems, their components and interactions, and relationships with community-based cultural, social, economic, and environmental needs.

Strategies:

A. Promote natural resource inventory projects of urban and community ecosystems at local and regional levels directed at furnishing information about comprehensible ecosystem components and processes to diverse audiences (communities).

B. Through needs assessments, gain an increased understanding of diverse audiences and their levels of ecosystem comprehension and appreciation.

C. Work through community-based organizations, professional organizations, public interest groups, and collaborators to address targeted audiences.

D. Utilize a variety of educational outreach methods and tools to develop, implement, and support volunteer and multiplier efforts.

E. Assess and review currently available educational resources for appropriate use or modification by Extension.

Educational Action II: ***Foster Sound Policy***

Goal 2:

Assist state and local entities in developing policies that conserve, restore, protect, and enhance urban and community ecosystems.

Strategies:

A. Identify exemplary existing policies that conserve, restore, protect, and enhance urban and community ecosystems.

B. Inform constituents of the need to integrate the conservation, restoration, protection, and enhancement of urban and community ecosystems into public policy.

C. Facilitate resolution of conflicts concerning urban and community ecosystem issues.

D. Encourage communities to celebrate and participate in such local, state, and national observances as Earth Day, Arbor Day, and National Drinking Water Week.

E. Support and coordinate community-based ecosystem enhancement associations. Promote CES involvement with local and state urban forestry, wildlife, and water quality councils.

Goal 3:

Foster communication, collaboration, and participation among all stakeholders involved in urban and community ecosystems.

Strategies:

A. Provide skill-building programs to Extension educators on collaboration, networking, working with under represented groups, influencing public policy, and conflict resolution.

B. Propose new educational methods for reaching ecologically based decision making processes.

C. Develop locally based information and education systems that can be used in resolving environmental conflicts.

Educational Action III: ***Encourage Effective Planning***

Goal 4:

Promote planning that considers human and environmental interactions in urban and community ecosystems.

Strategies:

A. Utilize culturally appropriate methods to understand opinions and attitudes of community groups and individuals and to determine state and local needs and issues as community groups perceive them.

B. Develop guidelines for a local interdisciplinary planning team that integrates human and environmental interactions, and publicize these through culturally appropriate delivery methods.

C. Devise and encourage use of an interdisciplinary review system to evaluate local plans for possible effects on urban and community ecosystems.

D. Build upon the capacity of communities to take responsibility for ecosystem enhancement.

Educational Action IV:
Promote Good Management and Stewardship

Goal 5:

Promote cost-effective management of community resources in an informed, organized, and protective manner that benefits ecosystems.

Strategies:

A. Help communities introduce resource management strategies in an ecosystem context to public officials, public employees, community leaders, nongovernmental organizations, and citizen groups.

B. Document successful resource management methods to use in educational programming.

Goal 6:

Encourage managers of natural resources, physical infrastructure, and social aspects of communities to interact effectively.

Strategies:

A. Stimulate integrated, interactive planning and decision making among agencies to improve communication on planning, budget, policy, and operational issues.

B. Review existing information and programming, accumulate and disseminate up-to-date information, and provide specialized training to foster urban and community ecosystem management.

C. Provide leadership in creating urban and community ecosystem educational programs for community planning and design professionals, green-industry employees, community-based and nonprofit organizations, and volunteers.

Goal 7:

Foster the use of scientific knowledge and practical information in management of urban and community ecosystems.

Strategy:

A. Form interdisciplinary teams to conduct research on urban and community ecosystems, and interact with these teams by discussing research needs, outreach programs, and applications.

Educational Action V:
Strengthen Extension's Commitment

Goal 8:

Strengthen the commitment and capacity of Extension to achieve UCEP goals.

Strategies:

A. Provide funding to implement Extension's program to conserve, restore, protect, and enhance urban and community ecosystems.

B. Identify state and local leadership.

C. Incorporate a broad range of expertise within Extension.

D. Expand relationships with other government agencies.

E. Recruit collaborators from a variety of disciplines and agencies.

F. Develop relationships with community groups interested in forestry, urban wildlife, water quality, and other environmental issues.

Goal 9:

Support local Extension efforts in urban and community ecosystem enhancement.

Strategies:

A. Enable and support local CES staff by providing tools, techniques and training.

B. Establish a system wide network for the communication of urban and community ecosystem programs, activities, curricula, and data.

C. Involve youth in specific ecosystem education and enhancement projects.

D. Integrate existing Extension volunteer programs and models into urban and community ecosystems education and training programs.

Goal 10:

Recognize and reward successful programs at state and local levels.

Strategies:

A. Include urban and community ecosystem enhancement activities in plan-of-work documents.

B. Establish criteria to evaluate programs that are consistent with UCEP goals.

C. Publicize superior accomplishments and nominate them for awards presented by such organizations as National Arbor Day Foundation and Renew America.

Appendix A: Defining an Ecosystem

For this plan and associated discussions, a definition of an ecosystem is required. This definition was not included in the body of the plan in order to de-emphasize the biological / ecological context and concentrate on the human context of future activities.

The working definition used here departs from classical ecological definitions in two important ways: 1) our term "ecosystem" is an area with a distinct physiographic and biological boundary; and, 2) our term involves ecosystem components that are at a scale where they directly impact the multiple or single community level.

Our working definition of ecosystem is closer to the Russian ecological term "biogeonose" which is a human defined and bounded ecosystem. The more nebulous and infinitely nested, scaled and overlapping Western ecosystem concept has great value, but lacks discrete educational handles for extension delivery. In other words, concepts without firm limits or edges are difficult to define to many audiences and communities. Without definition, educational programming on quality of life improvements and behavior changes will be difficult to design and evaluate.

An ecosystem possesses six primary, definable attributes:

A. Discrete structure (energy, soil, water, atmosphere, biological units);

B. Identifiable function (exchange of energy, exchange of materials through biotic and non-biotic means, disturbance regimes, successional patterns);

C. Interconnectedness (loose federation of interactions -- some more closely tied together than others but not a supra-organism, a chaotic system);

D. Complexity (biological integration having many inputs and outcomes, biodiverse);

E. Temporal change (dynamic not static, constant and continuous adjustments to input states, energy and material flow rates and transformations);

F. Spatial limits (individual organisms, genetically related individuals, communities, geophysical / climatic interactions with gene systems).

An "ecosystem" is a human defined and limited, relatively structured, homogenous area of dynamic matter and energy interchanges between and among biological and non-biological components.

An ecosystem's genesis and development depends primarily upon climate, landform, soil, biological systems present, and the homogenous interactions and transformations of components over time and space.

An "urban ecosystem" would be further defined by an ecosystem influencing, and being influenced by, human attitudes, human behaviors, regulatory policies, and a sense of resource control throughout areas where humans live, work and recreate at moderate to densely populated social scales. Note that more than 75% of our population is considered to fall under this definition of living in an urban ecosystem.

KDC 1995

Appendix B: Concept of Community

The term "community" is loosely and superfluously used in many contexts. Many times the term "community" is jargon for assuring inclusion and a delineator for defining political boundaries. A concept of community is required here to clearly understand our purpose, educational impact targets, and evaluation methodology.

Extension programming must constantly reevaluate the educational needs of individuals and of the communities to which they belong. In the past, our lack of fully appreciating or effectively defining our programming targets have lead to wasted efforts and disillusionment across many communities and educational professionals.

Sociologically, a sense of community for an individual has been tied to: nationalism (patriotism and flags); tribalism (states, heritage, religion, race, culture school / university, organizations); and/or, any strong sense of identity usually associated with a geographic or political line, social order, or working guild (neighborhoods). We all belong to a number of different communities where we find identity.

Today, society is evolving (de-evolving) into smaller identity groups. The splintering of large groups into smaller can be seen as factions in clubs, religions, and organizations. Demographics are clearly showing this trend of individuals identifying more strongly with smaller and smaller groups. With factionalization and fragmentation of society shown by census and other demographic tools, the old, large scale, administratively bounded educational programming units are not effective nor efficient management units.

Our working concept of "community" used here is not a town or city. These politically bounded units are not effective educational programming units although they are effective fiscal units. The boundaries we must identify and work within are social identity lines. These lines are becoming more difficult to ascertain because of electronic interactions. These social identity groups are "communities" as we define them here. It is clear we must function effectively at this community level.

Large grouping of communities (a town or city) can and should facilitate community activation and evaluate progress. Sometimes it may be necessary for these large groups of communities to regulate activities, if activities of citizens require such constraint. When communities are clumped together for management or programming activities, the best result that can be expected is to facilitate individual community activities or regulate them. Under these circumstances, our goal should be to provide guidance to allow communities to find their own way to meet their member's needs.

For educational programming to function effectively, we need to emphasize and facilitate a clearer definition on-the-ground of people needs, delineation of individual communities (social identity), and examination of specific community values (not family values). These items then become part of audience targeting for specific extension programming. *KDC 1995*

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