USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

URBAN & SMALL-SCALE AGRICULTURE

What is it and how do we plan it?

URBAN & SMALL-SCALE AGRICULTURE

What Constitutes Urban Agriculture?

Although USDA does not define Urban Agriculture, States may opt to use the modifier below.

There is no minimum acreage for planning and/or contracting land units.

FSA is the responsible agency for establishing farm records, however, NRCS must establish land eligibility for NRCS programs.

Land uses and land use modifiers are significant to conservation planning, programs, and results reporting. The NPPH (Title 180, Part 600) Edition 1, Amendment 9 added "Urban" as a land use modifier for use in conservation planning. The use of this modifier is optional, and may vary state by state.

Urban Modifier – Used when land is located in a landscape predominated by residential, commercial, industrial, and transportation uses.

Conservation planners determine when the urban land use modifier is appropriate to describe a planning land unit based on:

1) The predominance of all or some uses listed in the modifier's definition; and,

2) Analysis of how the uses listed in the modifier's definition influence the planning unit's natural resource capabilities, limitations, or management.

URBAN & SMALL-SCALE AGRICULTURE

Working with Urban Producers

To qualify as an Urban Producer, they must produce food, fiber, livestock, or other agricultural products with no minimum agricultural income and no minimum production duration requirement.

When working with an urban producer remember they are often new to USDA and our processes and will need help filing and understanding eligibility paperwork.

Keep a grass roots list of groups, institutes, and people who can and will assist urban producers. There are some soil labs that run specific reports for urban sites, extension personnel that have certain expertise they can utilize and other urban producers willing and able to share information.

Be knowledgeable of laws and ordinances in your area that urban producers may have to navigate and plan around.

URBAN & SMALL-SCALE AGRICULTURE

How and What Do We Plan for Urban Ag?

The resource concerns for urban ag are no different than any other land uses. All resource concerns fall under soil, water, air, plant, animal, and energy.

The 9 steps of planning are the same as are all the practices that are available for each state to utilize. Planners still must identify a resource concern and utilize conservation practices to solve that resource concern. Utilize the CPPE to ensure the practices chosen have a positive effect on the resource concern present. JAA (Job Approval Authority) is the same for each practice whether urban or large agriculture.

Be understanding of financial barriers that may prevent some urban producers from installing the most efficient practice and ensure that multiple alternatives are given for each resource concern.

Resource Concerns that are common for Urban sites:

- Sheet and Rill Erosion
- Concentration of Salts or Other Chemicals
- Soil Organism habitat Loss or Degradation
- Inefficient Irrigation Water Use
- Nutrients Transported to Groundwater
- Pesticide Transported to Groundwater
- Plant Pest Pressure
- Plant Productivity and Health

Practices that are common for Urban sites: (NRCS encourages a systems approach to conservation for all operations).

- Conservation Crop Rotation (328)
- Cover Crop (340)
- High Tunnel System (325)
- Irrigation System, Microirrigation (441)
- Irrigation Water Management (449)
- Mulching (484)
- Nutrient Management (590)
- Pest Management Conservation System (595)
- Residue and Tillage Management, No-Till (329)
- Residue and Tillage Management, Reduced Till (345)

A few interim practices that may have applicability on urban sites:

- Low Tunnel System (821)
- Raised Beds (812)

URBAN & SMALL-SCALE AGRICULTURE

How Do We Contract Urban?

Some practices have been calibrated to better fit smaller operations.
If there is no small-scale scenario available, use one that best fits the situation.

Conservation Cover (327):
- Pollinator Mix-Small Footprint

Conservation Crop Rotation (328):
- Specialty-Small-Scale

Cover Crop (340):
- Multi-Species Cover Crop per 1000 sq. ft.
- Mechanical Termination of Cover Crop per 1000 sq. ft.

Irrigation System, Microirrigation (441):
- Small Micro Irrigation System

Low Tunnel System (821):
- Low Tunnel < 1000 sq ft – Year 1
- Low Tunnel Management – Year 2-3

Mulching (484):
- Synthetic Material

Nutrient Management (590):
- Small-Scale Basic Nutrient Management

Raised Bed (812):
- Unframed bed field size < .1 acres contamination or debris sites only
- Unframed raised bed field size <.5 acres contamination or debris sites only
- Framed raised bed small lot contamination or debris sites only
- Framed raised bed < 500 sq ft

These are not the only small-scale scenarios and scenarios change yearly.
Review scenarios periodically to ensure you are applying the most appropriate scenario in conservation contracts.

URBAN & SMALL-SCALE AGRICULTURE

To achieve the optimal outcomes from urban agriculture, management systems and practices must be implemented to optimize the condition of the soil and natural resources on which these systems depend.

Urban soils differ from traditional agricultural lands because they are often highly manipulated and may have a long, complex land use history. Urban soils can present unique challenges and opportunities for conservation planning.

Potential Properties of Urban Soil

Physical Properties

Parent materials	Many urban soils have developed in imported materials, such as fill.
Coarse Fragments	Higher concentrations of coarse fragments are common in many urban soils.
Compaction	Compaction is common in urban areas.
Horizons/Profile	Horizons may be truncated or have weak development, based on parent materials and disturbance history.

Chemical Properties

Contamination/ Heavy Metals	Increased potential for soil contamination by heavy metals and organic compounds due to industrial land uses and historical use of industrial products.
Nutrient Content	Variable nutrient content. Nutrients may be low in soils that have not be used for gardening.
pH	Variable pH. Can have alkaline pH from incorporation of building materials.

Biological Properties

Organic Matter	Variable. Can be extremely high as well as very low based on the disturbance history of site.
Disturbance	Disturbance history has great influence on soil properties.

URBAN & SMALL-SCALE AGRICULTURE

How to Connect with Urban Producers

Many things can be done statewide to increase participation and develop relationships with Urban Producers:

- Utilize non-profits and other partner organizations for holding local meetings
- Utilize and fund 1890 and 1862 universities for research, outreach, and education for our urban farmers
- Train our specialist and conservation planners utilizing National guidance and our (local) urban conservationist
- Work with urban ag. sub committees to address barriers and resource concerns

However, the ability to connect with Urban producers lies in the local community.

- Utilize local experts and attend workshops
- Utilize county extension agents & meetings
- Talk to known local urban producers
- Attend farmer's markets with a display and fliers if allowed
- Become a part of community gardens and stop by frequently

URBAN & SMALL-SCALE AGRICULTURE

"IF YOU BUILD IT, THEY WILL COME!"

What is it and how do we plan it?

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

2023