LEVERAGING YOUR LANDSCAPE: A GUIDE TO EVALUATING AND PLANNING FOR FUNCTIONAL, ENJOYABLE OUTDOOR SPACES

Andrea Ludwig, Associate Professor and Extension Specialist Department of Biosystems Engineering & Soil Science

HOW TO USE THIS GUIDE

This publication is intended to help you or your clients analyze and change the function of your outdoor spaces by helping determine what you need from a landscape. Setting meaningful and achievable goals, in phases if needed, will maximize your investment. Use this document as a roadmap for homeowners or anyone considering changes to their outdoor space or wishing to engage a landscape architect or designer.

DETERMINING IMPORTANT NEEDS IN YOUR LANDSCAPE AND PLANNING TO ACHIEVE THEM

The first step to changing the function of an outdoor space is to assess desires for the space. Some questions to consider include:

- What do you want or need from your outdoor space?
- What is your and your family's lifestyle and how can your space reflect that?
- How can your outdoor space enhance your life?
- Who needs to use the space and what do they need to do with it?
- What level of maintenance is practical for your lifestyle?
- Who will be responsible for the upkeep and maintenance?
- How will needs change over time?
- What is your budget?

Once all those questions are answered, you will likely have a long list of wants and needs. While it is good to brainstorm, the reality of what is needed to achieve all of the items on your list can quickly become overwhelming. Prioritizing these needs as well as considering limitations, such as budget and space, will help break the list into manageable pieces, allowing high-priority goals to rise to the top. This list will help identify short-term (zero to two years) and long-term (three to five years) goals. The checklists on the following pages provide a set of steps to ensure success.



It is also an excellent time to familiarize yourself with any local rules and regulations that apply to the property. These can include homeowner's association rules, covenants, local ordinances, zoning rules, easements, stormwater requirement, sediment, erosion control and deed restrictions. Also, knowing the history of the land is valuable, so investigate historic aerial imagery, historical deed records, and anything else that might give you a glimpse into the past.

TAKING A LOOK AT WHAT YOU HAVE

Consider your responses on the checklist provided. Did any themes emerge? Were any new or unvisited interests identified? The use categories can be ranked from highest placed importance to lowest, providing a basis on which to prioritize needs and set meaningful goals.

Now that you have established your landscape goals and prioritized them, it is time to look at the current condition of your outdoor space to evaluate existing conditions. Having an inventory of your conditions will help you to make realistic choices and avoid unsuccessful plan selections and other decisions that waste time and money. A landscape assessment should take a broad view of how the landscape relates to the people and natural environment around it. This process will guide you through evaluating existing plants, assessing growing conditions in your outdoor space, and setting realistic goals that match how much maintenance is realistic. These steps below will aid in the creation of a basemap.

Create a basemap

This diagram can be intricate or general depending on your level of investment. The goal is to create a spatially accurate representation of your space with layers of information, then you can sketch ideas. Here are the steps:

- 1. Draw property boundaries on a sheet of paper. Use graph paper and set a scale for improved accuracy. For example, set 1 graph paper block to equal to 2 feet (or greater for large properties). Leave some space around the perimeter to include information about adjacent property.
 - Tip: Check out your local government's resources for parcel maps to verify your property dimensions. Some cities and towns have geographic information systems (often referred to as "GIS") available online.
- 2. Add a north arrow.
 - Tip: The Google Maps application has a compass feature that shows which direction the phone is facing.
- 3. Draw permanent and semipermanent structures, like the house, driveway, walkways, deck, patios, sheds, outbuildings, fences, etc. Make note of doors, windows and porches and indicate view direction or foot traffic considerations.
- 4. Add utility infrastructure, such as septic systems, buried or overhead lines, and irrigation systems.
- 5. Identify interesting features to preserve, like rock outcrops, existing vegetation, drainage ways or creeks and associated riparian buffers.
- 6. Add notes of considerations from adjacent property, such as undesirable views, encroaching trees, close buildings or other needs for screening, buffering or other means of separation.
- 7. Add layers of information that may be useful in decisions about general use areas, plant selection, maintenance or conservation strategies.
 - Topography The lay of the land dictates the way water flows and has broad impacts on the way your space looks and functions. Add contour lines or lines of similar elevation to highlight hills, depressions, valleys and ridges.
 - Drainage and water features Water moves with gravity either into the soil and across the surface until it can soak in or run off. Ensuring adequate drainage away from building foundations and traffic paths is essential. Create a water flowpath map of your property that tracks runoff from its origin (i.e., gutter downspout or driveway) through drainageways until it leaves your property. The best way to do this is to go outside during a rain and observe. Note opportunities for rain gardens or other ways to treat runoff. Also include any natural water features such as floodplains, swales, wetlands and streams.
 - Light Light is necessary for plant growth. Full-sun plants require at least six to eight hours of direct sun exposure. Shade plants require fewer than four hours. The sun will always be in the southern half of the sky moving from east to west, lower on the horizon in winter.
 - Climate and microclimates Much of Tennessee is in USDA cold hardiness zone 7, with some of the high-elevation and northern areas in zone 6. While your space is subject to the same general climate conditions, microclimates may exist in your space. Examples of a microclimate may be a cool and moist pocket on the north side of a large rock outcrop or a particularly sunny and warm spot in a courtyard. Take note of air movement that might affect where cold, dense air hits plants or heavy, damp air may settle and increase risk of disease. Think about where you see frost occur first or last because these can be good indicators of where cool air drains and settles.

CHECKING IN WITH YOUR LANDSCAPING NEEDS

Check the activities and people that the outdoor space should accommodate:

Children	□ Sports	Special Needs Access			
Elder Adults	☐ Games	Hobbies			
Pets	Gardening	Extra Parking			
Outdoor Dining		U Walking Paths			
Entertaining	☐ Wildlife viewing	□ Water Features			
Check the personal preferences that apply:					
Formal	Minimal	Rustic or Natural			
Informal	Bold Contrasts	Color Variety			
	Curves	Contemporary			
Privacy	Symmetry	Eclectic			

In the space below, write down the things about your current outdoor space that feel limiting or that you wish to change:

On a scale of one to ten, indicate the importance of each use category.

Landscape that has seasonal color.	1	2	3	4	5	6	7	8	9	10	
Emphasis on native and sustainability.	1	2	3	4	5	6	7	8	9	10	
Outdoor living areas, seating, fire pit.	1	2	3	4	5	6	7	8	9	10	
Children's play area.	1	2	3	4	5	6	7	8	9	10	
Privacy, sound buffers, meditation.	1	2	3	4	5	6	7	8	9	10	
Wildlife viewing, habitat.	1	2	3	4	5	6	7	8	9	10	
Entertaining (party, grilling, games).	1	2	3	4	5	6	7	8	9	10	
Pet space, chickens.	1	2	3	4	5	6	7	8	9	10	
Edible garden, raised beds, compost.	1	2	3	4	5	6	7	8	9	10	
No-mow areas, wildflowers, open space.	1	2	3	4	5	6	7	8	9	10	
Outdoor art, sculptures, collections.	1	2	3	4	5	6	7	8	9	10	
Shed, storage, workspace.	1	2	3	4	5	6	7	8	9	10	
Patio, pergola, terrace.	1	2	3	4	5	6	7	8	9	10	
Water features (ponds, fountain, rain garden).	1	2	3	4	5	6	7	8	9	10	
Other:	1	2	3	4	5	6	7	8	9	10	

Collecting Information on Your Soil:

Test your soil every three to five years and keep a log to keep track of sample dates and the parameters.

Sample area: _____ Date of test: _____ Parameters: _____

Evaluate compaction or saturated soil conditions with a simplified percolation or "perc" test. Follow steps for conducting a perc test (see UK ID-237 in reference list for details). For general turf and landscape beds, perform the test in the top several surface inches. Go deeper for trees and to at least a foot for rain garden considerations. Follow up with a soil texture analysis to help understand the composition of sand, silt and clay particles in your soil.

Perc Test Rec	ording Table	Percolation Rate		
Time	Water Depth (inches)	[change in depth over time]		
		Average Rate:		

- Soil conditions Soil characteristics can dictate what plants will and won't grow. Take a shovel and turn over the top 6 inches to look at the color and feel the texture. Test areas for signs of compaction. Collect a soil sample from different areas and send it to the lab for analysis of pH, plant nutrients, organic matter and texture. Note the depth of soil above bedrock or other root-growth restricting layers, whether a shallow water table exists, and the general soil moisture conditions in areas during wet and dry weather.
- Existing plants Create an inventory as best as possible of all the plants on your property, starting with focal centers and working out into less trafficked or less visible areas. Make note of plant health and your satisfaction with the plant, then differentiate between desirable and undesirable plants. Make a plan for removing invasive species or unhealthy plants and replacing them with native species or noninvasive alternatives.
- Views The views from windows, porches and patios are just as important (if not more) than those of passersby from the road or the neighbors next door.
- Needs for screening (privacy, boundary demarcation, fencing, sound buffering, etc.).



Use aerial photography to help see the space from a bird's-eye view. Use websites like Google Maps or your local city/county geographic information systems (GIS) page to access aerial photography.

Bubble Map Your Ideas

Now that you have established a baseline condition in a diagram, you can make informed decisions about changes or additions in general use areas. The goal of bubble mapping is to ensure that the needs and priorities identified in your goals are represented spatially with bubbles so that space is allocated with intention. Of course the same space can serve multiple purposes. Make multiple copies of your diagram or overlay tracing paper onto the diagram. Draw bubbles on the map to indicate general use areas. When adding bubbles, consider the information on the underlying diagram and make sure the intended use of space matches well with the characteristics of the space. For example, you would not want to plan a pollinator garden on the north side of a tree line where there is not much direct sun, nor at a soccer practice area on a slope. As you make these considerations, think about what limitations are non-negotiable and which ones may be changed to accommodate the needed use. As with everything, compromises will certainly be needed along the way. It can be helpful to talk through some of these topics with your family or friends who also use your outdoor spaces.



A bubble plan shows spatial extent and relation between general use areas and was easily accomplished with simply a pen and paper (credit Carol Reese, University of Tennessee).



Bubble map your ideas on top of your aerial photography or diagram to help delineate and plan for general use areas.

MAKING A LANDSCAPE PLAN

With the bubble diagram, you now have a spatial visualization of your goals for your outdoor space. What do the bubble diagram and the existing conditions have in common? What is different? What changes need to be made in order to achieve the goals contained in the bubble diagram? This calls for a plan of action, so circle back to the goals you identified and prioritize the activities that are needed to achieve the desired functionality. Factors that may affect prioritization include budget, season, family considerations or time needed to complete the effort. Evaluate how much time, effort and expense each activity will require. Consider choosing activities that are relatively easy to accomplish first to get the ball rolling. Then, decide on groups of activities that make sense for phases moving forward. Remember to include ongoing maintenance activities to make sure that time and budget goals are realistic and practical for the resources you have. Above all, remember that there is no beginning or end to nature, and that patience will be needed every step of the journey.

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