

LESSON 1

Introduction and Basics of Organics and Permaculture

There are as many gardening practices as there are gardeners. In this lesson, we will touch on two broad gardening concepts: organic agriculture and permaculture. We'll discuss how these two concepts might guide your garden design and management. We'll introduce these concepts because, statistically, home gardeners are some of the greatest contributors to pollution through overuse of pesticides and fertilizers. Learning garden methodologies that omit the use of these chemicals within the ecology of your site will grow a healthier garden and create less harm to the earth. Throughout the next seven lessons, organic practices and permaculture methods will be incorporated. For further reading on these topics, refer to the references listed at the end of the lesson.

Learning Objectives

1. Define organic gardening and principles of permaculture.
2. Distinguish between organic and conventional gardening practices.

Organic Gardening

Organic gardening and farming as defined by the US Department of Food and Agriculture is a production system that avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators, and livestock feed additives. While this definition is how the USDA certifies Organic Growers, farmers and gardeners may use the term "organic" more loosely.

As an overarching concept, organic gardening is defined primarily as not using synthetic chemicals. Organic gardeners give careful attention and thought to their gardens. They focus on creating healthy soil, and encourage positive natural interactions among a diversity of species.

"Synthetic" is defined as human-made, not of natural origin. Organic gardening can use additions to the garden bed, just like conventional agriculture, but these additions are all made from substances that occur in nature. Organic growers focus on creating healthy soil, or as some like to say, "Dirt First!" The goal in organic gardening is to create soil rich in nutrients and a garden structure that fosters disease prevention. In organic gardening, problems are still treated, but the primary aim is to prevent them from occurring in the first place.

Many farmers and gardeners adhere to organic growing practices without acquiring organic certification. This is often a means to reduce costs and time associated with the rigorous requirements of certification. Farmers and gardeners that observe organic practices without acquiring certification often refer to their practices as no-spray or chemical-free. For the purpose of this manual, these practices will continue to be referred to as organic gardening.



ACTIVITY 1

As a class, brainstorm substances of all kinds that might be added to a garden. Is each substance organic or not?

Permaculture

Permaculture is a design system based on the relationships in nature. It promotes reflecting on natural patterns and mutually beneficial relationships. Permaculture concepts can be applied to any system or structure in our society, not just to gardens. The ethical bases for permaculture are:





1. *Care of the Earth*: Provision for all life systems to continue and multiply.
2. *Care of people*: Provision for people to access those resources necessary to their existence.
3. *Fair Share*: In times of abundance, we share with each other.

Permaculture utilizes multiple design principles that can be easily related to the practice of gardening. In all cases, careful observation and planning are key to permaculture practices:

1. *Work with nature rather than against it*: Use strategies that encourage positive natural processes in the garden rather than treating the garden as completely separate and in conflict with nature.
2. *The problem is the solution*: With creativity, it's often possible to gain a solution or something positive out of a "problem." A classic example in agriculture is animal waste: It can be viewed as waste that must be disposed of or as a valuable resource to help plants grow.
3. *Make the least change for the greatest possible effect*: If your gardening efforts feel productive rather than wasteful, your gardening experience will be more positive. By carefully considering your options in solving a problem, many times you can develop a solution that requires less effort, material and energy expenditure.
4. *The yield of a system is theoretically unlimited*: With creativity, you can make the most possible of your available resources.
5. *Everything gardens*: All things, living and nonliving, have an effect on their surrounding environment (from *Permaculture, A Designer's Manual*, Mollison, 1988, p.15-16).

In a nutshell you can practice permaculture by continually asking yourself "what would nature do?" So, for example, since there is no such thing as 'waste' in nature, ALL biological resources can be re-used and re-cycled.

This guide will not go into detail on these ethics and principles, but we encourage you to refer to Bill Mollison's book noted above, or to take a permaculture course to delve deeper into this important, wide-ranging philosophy. The attached appendix, "Permaculture Principles", from the Occidental Arts and Ecology Center is a good, brief overview of this philosophy and practice.



ACTIVITY 2

As a class, look at the list of permaculture design principles above, as well as those in the permaculture appendix, and brainstorm ways in which they can be incorporated into a garden design.

References

1. USDA.
"Organic Production/Organic Food: Information Access Tools."
Available at: www.nal.usda.gov/afsic/pubs/ofp/ofp.shtml
2. Fahrer, Benjamin. 2006.
"Permaculture Principles."
Provides a quick overview of the ethics, principles, and roots of permaculture practice.
3. Mollison, Bill. 1988.
"Permaculture: A Designer's Manual."
A great resource to learn more about all aspects of permaculture and how to apply them in your garden and elsewhere.