In the series: ***Getting Started with Forestry***

This thing called forest management - does it really differ from gardening?

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New York is over 60% forested, and many people have noticed the growing activity associated with forestry and forest management. We think about the importance of forestry, for local economies and environmental concerns. While many people are interested in forest management, most do not realize exactly what is involved nor how it relates to other familiar activities.

For my purposes here, let me characterize forest management as a process focused on the care and tending of forest vegetation, water quality, and the associated wildlife communities. This begins by recognizing landowner's objectives, identifying plans for short- and long-term accomplishments, and includes ample consultation with qualified professionals. This process also necessitates decision making about how to accomplish objectives within the numerous constraints of economics, soil suitability, and the surrounding forest areas. As such, forestry and forest management involve many of the same considerations as gardening. But, as you will see, they also differ.

Gardening is truly a rewarding experience. This applies to all types of gardens, from vegetable gardens to flower gardens and butterfly gardens. You spend considerable time during the year thinking about the steps you must take to establish your garden. You think about the crops you want to produce, how each plant can be arranged in your garden to allow for it best growth and development, and the fertility of your soils. Towards the end of the summer, you start thinking about the timing of harvests to collect your produce before frost. At times, you may also have to deal with other factors such as

insect pests, weeds, and disease. The planning you complete for your garden is, in many respects, similar to forest management planning.

Forest management is also a truly rewarding experience. Forestry requires you spend time planning, thinking, and decision making. Like gardens, properly managed forests are capable of producing numerous benefits - all from the same acre of ground. Efforts to use forests to attain multiple objectives, such as wildlife, water quality, recreational opportunities, aesthetic qualities, soil fertility, and timber production are known as forest stewardship. Historically, forests were seen only for their timber production value, but this is not consistent with our current understanding of forest stewardship.

The activities and rewards you enjoy from your forest are numerous, but the first step requires you recognize your objectives. A professional forester, or a Cornell Cooperative Extension volunteer such as a Master Forest Owner, can help you think through your objectives. If you want only to enjoy the solitude of walks through your forest then your objectives and planning will differ substantially from someone who enjoys bird watching, turkey hunting, and revenue from an occasional well-planned timber harvest that helps pay property taxes.

Just like garden plots, forest stands, or areas of forest having similar characteristics, are capable of producing renewable crops. However, different from gardens, forest "crops" can be much more varied, and produce throughout the year (think about cross-country skiing in December, maple syrup in the spring, and the beautiful fall foliage) when managed with a stewardship ethic. Many of these crops are never really harvested or removed, others can be harvested every year, while some, like timber, may be harvested only infrequently - ranging from every few years to several decades depending on your management plan.

In gardens, you must plan ahead, arranging your plants to ensure your corn does not shade your tomatoes and that your carrots have sufficient room to expand. Similarly, in forests, trees need adequate resources to allow for adequate growth. The way that trees are arranged in your forest partially determines the type and abundance of the crops and benefits you can enjoy. Forests that are thick and crowded may be suitable for some types of wildlife, while forests that have been thinned may suit other types of wildlife plus your needs for timber production and/or large-crowned sugar maple that provides you with brilliant orange fall foliage and abundant sap production.

With gardens, we frequently have the opportunity to test the soil for its nutrient levels, and provide additives like fertilizer or compost to compensate for deficiencies. By amending the soil in gardens, we can grow plants that would otherwise not survive. We can test forest soils, but due to their greater extent and the economics of investing in a

crop that may be decades from realizing a return, soil amendments are less commonly used. Rather, foresters are trained to match tree and shrub species with the appropriate soil types. For example, oaks may be best suited for droughty soils, cottonwood on stream banks, sugar maple and white ash on well-drained fertile loams, and Norway spruce on heavy or clay soils that are less well drained. Also, while many gardening "mistakes" can be corrected the following year, "mistakes" in forestry may take decades to correct. All the more need to work with a professional forester.

With the fall harvest just past, many of us have seen or been involved in the harvesting of numerous crops from our gardens. Gardens are typically harvested on an annual rotation. This cycle is based on the developmental stages and physiology of garden plants. Similarly with forests, many of us have seen either the harvesting of a forest or logs on trucks bound for the mill. Your garden looks quite different following the removal of your vegetables, and forests look quite different after trees have been removed. In both gardens and forests, we harvest crops knowing that we depend on plants for food, shelter, and numerous other qualities. Think about the quality of our lives if we didn't have tomatoes, potatoes, green peppers, black cherry, sugar maple, or white pine. We can appreciate the harvesting of gardens and forests knowing that we will replace or regenerate them in the next growing season. For forests, the changes following harvests will also benefit an entirely new suite of wildlife species not found in mature forests. Just as our gardens, our forests can be harvested and regenerated to produce the future crops and benefits we desire.

I hope I have provided some insights into the process of forest management. Forest management is similar in many respects to gardening, but because of the size of forests and the duration we manage them, our strategies are different. Forests are a wonderful renewable resource, some need to be preserved but others need to be professionally managed so we can all enjoy their many benefits. Please feel free to contact your county association of Cornell Cooperative Extension office, NYS-DEC office, or professional consulting forester if you would like more information on forest management.