## FOCAL POINTS FORESTRY

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Bottomland hardwoods are a focal point treated differently than upland hardwoods

## INTRODUCTION

In the agriculture sector, site specific crop management is mainstream. Sometimes called *precision agriculture*, this system employs an integrated crop management approach that matches the many production inputs to the attributes of the soil. Precision agriculture uses satellite technology to guide the application of fertilizer/herbicides/lime etc. at precise rates, varying throughout the field depending on the soil characteristics. This method makes best use of these soil additives, assuring that no area receives too much or too little. Each acre is treated uniquely, as though there are a series of small fields all falling within a larger field, working together for maximum profit. The result is both environmental and economic benefits in that over-applications are avoided. Although not exactly the same, the concept of precision management can also be applied to forestry.

## **OUR FORESTS ARE HIGHLY DIVERSE**

Within the eastern U.S., most forestland is privately-owned by individuals rather than by the government or forest industry. It's common for private properties to have regular turnover in ownership, with each landowner using the land in different ways. For instance, early settlers cleared the forest to create farm and pasture land



and to produce wood needed for dwellings, fencing, tools, firewood, and more. Many forests were fenced and used for livestock pasture and were often burned to stimulate the growth of grass. Later, nonproductive fields were abandoned and allowed to grow back to forests naturally. Still other highly erosive lands were planted back to trees through various government programs that began in the mid-1900s.

Because of all of these previous uses (and misuses), most privately-owned forests now have considerable diversity. Past practices created forests with an assortment of tree species, varying in age and condition. For example, if portions of the forest were previously exposed to livestock pasturing, ground fire, timber harvesting, or even row cropping, these areas have different attributes than other portions of the forest that were not exposed. Further, site factors, such as soil, position on the slope (ridges vs. valleys), and aspect (the direction that slopes face), also have a measurable impact on forest composition and condition. It's easy to see how our forests are highly diverse!

Thus, many private forests are more a conglomerate of small, unique stands, falling within the larger forest. Each of these smaller stands should, based on both economics and ecology, be managed with careful analysis of what it indicates is needed.



Mature white oaks - a focal point ready for market.

Consider a 100-acre hardwood forest that may have 20 percent acreage with poor quality trees, previously mismanaged and without good economic potential. This area could be regenerated (clearcut) to create young growth and early successional habitat. An additional 50 percent of the acreage might have fine quality, middle-aged sawtimber, needing thinning to gain some monetary return and to energize the remaining trees so that they'll be ready for an even better follow-up harvest 15-20 years hence. The balance (30 percent) is simply too young for commercial harvest, is overstocked, and is experiencing suppressed growth. There, an owner could implement *crop tree release*. This entails deadening undesirable trees, thereby assuring a future forest with well-spaced, highly desirable crop trees. These are examples of *focal points forestry*.

## FOCAL POINTS FORESTRY (FPF)

When managing privately-owned forestland, **too often a sweeping broad-brush forestry prescription is made and implemented over the entire forest, when instead focal points forestry should be applied**. Focal points forestry (FPF) is introduced here not an endorsed term used by the forestry profession but as a generalized concept that should be considered when working with woodlands that have great diversity, as was described above.

In the discipline of visual art, the *focal point* is that portion of a composition to which a viewer's senses are most drawn. There may be several focal points within the same art piece, each with different features that collectively make the artwork complete. In this sense, forests are a metaphor of art. There are many individual focal points (referred to as stands) that fall within the larger forest. Each of those focal points should be managed according to their unique traits, rather than clustered together into one unit.



Ash Crowns – Focal point of young hardwoods after crown-touching release

The following are two common examples of how FPF could apply:

- 1. It is not that unusual for landowners to be convinced to regenerate (clearcut) an entire block of hardwood forest, when only a portion (or portions) of it truly meet the criteria for a clearcut. Nested within the larger block may be smaller focal points that contain excellent quality younger growing stock timber, that just needs adequate time to continue developing. Why regenerate the entire block, when only portions need it?
- 2. Another example is the *do nothing and have a follow-up inspection in 10 years* recommendation. This prescription is sometimes given when landowners want to harvest timber, but there is not sufficient volume to warrant a timber sale. Yet existing within the forest are focal points that would greatly benefit from timber stand improvement (TSI). TSI is a cultural practice applied to forests to improve the composition, stocking and growth of trees thereby making forests "better." Why do nothing to an entire forest when doing something beneficial on portions of it is better?

Indeed, *there is a better way*. Most of the U.S. regions are experiencing an increase in the number of forest landowners, often having smaller acreages. This situation is ideal for focal points forestry. With FPF, essentially all crop trees are allowed to reach their economic maturity, like row crops where every acre is managed to full potential. Further, FPF creates great diversity in habitat, age structure, and species-conditions highly desirable for those landowners who consider the other uses of their forest (recreation, wildlife, and aesthetics) equally important!



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