Quick History of Forests in Frederick County, Maryland

pre-1700 – It is believed that White Pine and Chestnut predominate. Oaks, maples, hickories, ash, and tulip poplar co-dominate. Typical forest was probably more sparsely populated with trees (compared with today's Frederick County forests), but with a wider mix of tree caliper sizes--1'' caliper to huge, 60" + caliper (compared with today's typical Frederick County range of 1-24" caliper). Typical 'old growth' forest appearance with a relatively diverse tree and shrub layer and a more abundant ground layer of herbaceous material (ferns and flowers, etc.) was probably present. Deer population was sparser, so the browse problem for rare or infrequently-distributed species was probably not as prevalent as today.

1700-1820 – forest clearing of flat areas for farming operations, particularly in the Frederick valley, and later the Middletown valley. Fruit production in Carroll and Frederick Counties abundant.

1820-1870 – continued clearing in other (mostly flat) portions of Frederick County for farming operations.

1870-1910 – rapid depletion of almost all forest areas in Frederick County except for small patches around farmsteads and in creek/floodplain areas. Massive forest fires deliberately set in the mountain areas to stimulate blueberry production on the mountain slopes. Massive cutting operations for charcoal production occur.

1906 – Maryland Forest Service started.

1910-1925 – Chestnut blight kills many Chestnuts to the stumps. It is believed that this was the low point for forests in Frederick County in that Frederick County was almost completely denuded of significant forest stands by early 20th century.

1930-1960 – Abandonment of previously farmed steep slopes and wet areas allows for natural regeneration of stands of deciduous trees (oaks, maples, hickories, tulip poplar). Oaks flourish because they benefit from open, sunny conditions which allow for best growth. The abandonment of fields creates relatively uniform stands of forest—uniform in age, and with somewhat limited species diversity. Under-story (shrub and herbaceous) species are probably not as prevalent or diverse as pre-1700 conditions. Much of the forests that we see today were largely created during this period, and are generally considered to be low-medium to high-medium quality forests in terms of ecological health and diversity.

1950-1970 – Maryland Forest Service promotes pine stand (White and Scotch Pine) plantations.

1980 – Gypsy Moth invasion begins, stressing oak species the most.

1970—present – Development and residential growth fragments the forests into smaller ownership patterns of predominately 5-25 acres. Owners manage these with "selective-cuts". Selective-cuts are more aesthetically pleasing than clear-cuts, provide "seed trees" to more quickly establish regeneration, and help retard erosion. However, white-tailed deer population explodes, becoming a problem for indigenous herbaceous species (ferns, flowers, etc.) and, to a lesser extent, emerging tree seedlings and shrubs.

Future Prognosis – It is likely that increased fragmentation of ownership patterns will occur, further supporting selective-cut operations. Active site-specific management (selective-cuts) are likely to promote greater age and species diversity, since many owners now incorporate aesthetic and wildlife values into forest harvest operations. However, oaks will likely decline, while maples will probably predominate. Rapidly growing "invasive exotics" (Norway Maple, Tree of Heaven, etc) will gain further footholds. Rare and endangered shrub and herbaceous species will suffer from continued white-tail deer browse.

Maples do well in shady situations, the exact type of situation created by selective-cuts. Invasive exotics will take a greater foothold because they are aggressive in establishing themselves in disturbed environments, such as re-grading for development or selective-cut operations. White-tailed deer population will continue to be a problem, further restricting a healthy diversity of (especially) shrub and herbaceous species/ growth on a wide-scale basis. Honeysuckle, English Ivy, (also invasive, exotics) will spread even further into more parts of the mountainous areas of Frederick County. Shady conditions of selective-cuts and Gypsy Moth investations do not favor oak production.