# FOREST FUN QUIZ ANSWERS

#### 1. 70%

USDA Forest Service. 1993. "Forest Resources of the United States". General Technical Report.

# 2. Net forest growth exceeds harvest by 37 percent.

Nationwide, net forest growth exceeded harvest in 1990 by about 37 percent. Net forest growth in the U.S. has exceeded harvest for decades.

#### 3. False

There was about a one percent loss almost totally due to urban expansion and infrastructure development (roads, powerlines, etc.). If this rate of forest loss were to continue, another two to three percent of forest lands wold be converted to other uses by the year 2050.

# 4. Increased on a per capita basis by over 30 percent since 1970

Each person in the U.S. uses about one cord of wood/year, or about 4 pounds/day, or the equivalent of a 16-inch diameter, 100 foot tall tree each year. Since 1970, wood use per capita has been steadily increasing.

## 5. 50%

About 53% of Michigan is forested or 19.3 million acres. Forest acreage is increasing (933,000 acres between 1980 and 1993). In the year 1600, about 95% of Michigan was forested. 10,000 years ago, none of Michigan was forested (glaciers). Forest cover and composition has ebbed and flowed repeatedly over the centuries. Today, Michigan has the fifth largest forest in the U.S., preceded by Georgia, Alabama, Oregon, and North Carolina.

# 6. False

Michigan forest covers about 53% of the pre-European settlement area. Most of the reduction occurred around the turn of the century due to agricultural development. Today, the forest area in increasing. Michigan is not experiencing deforestation.

# 7. Sugar maple

FIA 1993 statistics table 10, page 47, all trees 1.0+" and larger, #trees sugar maple, red maple, balsam fir, quaking aspen, n. white cedar FIA 1993 statistics table 12, page 49, all trees 5.0+" and larger, volume sugar maple, red maple, quaking aspen, n. white cedar, red pine FIA 1993 statistics, U.P. books, #trees sugar maple, balsam fir, n. white cedar, red maple, quaking aspen

FI A 1993 statistics, U.P. books, volume

sugar maple, red maple, n. white cedar, quaking aspen, balsam fir

# 8. 139

Source: DNR Wildlife Division web site at <a href="http://www.dnr.state.mi.us/wildlife/Heritage/T&E/default.htm">http://www.dnr.state.mi.us/wildlife/Heritage/T&E/default.htm</a> 37 endangered, 47 threatened, and 125 species of special concern.

#### 9. \$9 billion

Source: DNR Wood Products Directory. Value does not include forest recreation, estimated at another \$3 billion (source unknown). Estimates of monetary vary but with any estimation, forest industry is a critical part of the Michigan economy.

#### 10. Disease

FIA 1993 Statistics, page125, table 67.

Only a small portion of the total mortality was attributed to an identifiable cause. The proportions of identifiable causes were extrapolated to the total. Disease (114,927), Harvest (101,918), Weather (41,981), Insects (16,078), Human-caused (12,723), Other (12,803). The harvest volume is from page 65, table 21.

## 11. Root suckers

Aspen root systems maintain thousands of dormant buds per acre. Upon death of the parent trees, the sucker buds begin to grow rapidly using the resources of the parent root system. If the suckers encounter full sunlight, they continue to grow rapidly. Shade will slow growth and vigor, possibly leading to mortality. Most of our tree species regenerate well naturally with existing forest management systems. Planting is employed only were natural regeneration does not meet landowner objectives.

# 12. Are less abundant.

Research clearly shows most game species require young forests as a major part of their habitat requirements. Old forests also meet some important needs. Age and structural diversity provide the best habitat for these species. Other species have different needs.

#### 13. Young

Young forests are more vigorous, converting more  $CO_2$  into wood than older forests. Another gas, oxygen, is produced in greater quantity by younger, more vigorous forests. Old growth forests generally experience a balance in  $CO_2$  and oxygen, extracting little more (if any)  $CO_2$  from the air than what is released. Old forests also consume about as much oxygen as they produce.

# 14. Wood (of course!)

Environmental impact is measured in many ways; how long an impact lasts, the size of an area affected, energy consumption during processing, transport risk, renewability, etc. Wood is generally accepted as having the lowest overall impact.

#### 15. 367

Source: DNR Wood Products Directory. These 367 mills include only the primary wood using mills such as sawmills, pulp mills, veneer mills, etc. Additionally, there are about 1,733 manufacturers (furniture, cabinet, milling, flooring, etc.) and over 1,000 loggers, truckers, and wood brokers. About 150,000 jobs are supported by the industry. Over 900 wood using products are made by these mills and manufacturers in Michigan.

#### 16. 30 Million

Source: Michigan Forest Resource Alliance.

This figure includes Christmas trees. At a typical forest plantation spacing (6  $\times$  8 feet) that is enough seedlings to plant over 33,000 acres, which is about the size of 1-1/2 standard townships.