Here's to the Land of the Longleaf Pine

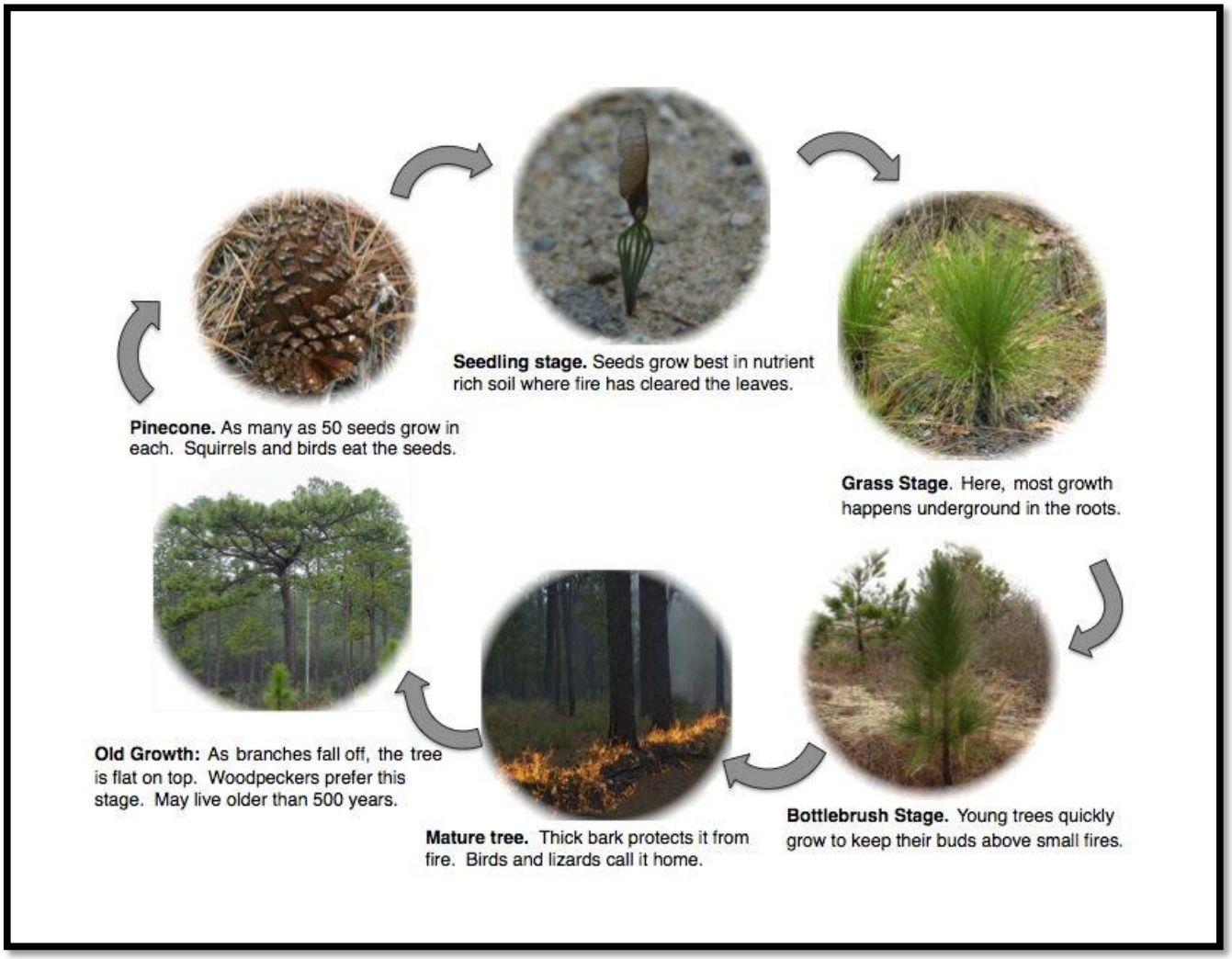
Longleaf pine ecosystems once covered more than twenty times their current land area, stretching from Virginia to Texas. For thousands of years, unique plants and animals thrived in these habitats, with frequent lightning-**ignited** wildfires. Many species became increasingly rare with habitat loss from logging, development, and **fire suppression**. The sandhills region, in Weymouth Sandhills Nature Preserve, of NC **safeguards** some of the best remaining examples of longleaf pine habitat.

Fire Returns to the Pines

Much like a doctor prescribes medicine, park rangers and biologists set **prescribed** fires to maintain healthy longleaf pine ecosystem. Trained professionals keep these fires under control by clearing paths to contain them and igniting them only during ideal weather conditions. Prescribed fire removes some tree species, like sweet gum and turkey oak, that otherwise compete for **resources** with the **fire-resistant** longleaf pines. Fire clears leaves and brush from the forest floor, which helps rare wildflowers and native grasses grow. In fact, the longleaf pine ecosystem will only exist in special places where fires happen once every three to ten years.

Adapted for Fire

After a fire, the seed of the longleaf pine tree is ready to **germinate** because leaf litter burns away. A young longleaf begins to grow underground, establishing a strong root system. Above ground, it begins to look like a clump of grass for the first 5 years. After that **initial** grass stage, the longleaf is fast-growing as a young **sapling**. It develops a long, straight trunk with no branches and looks like a bottle brush. This adaptation helps its growth bud survive by reaching higher than the flames of forest

fires. As a tall sapling (6-10ft.) the longleaf pine tree starts to grow branches with clusters of 6-12” long needles (leaves), bundled in threes. A mature longleaf pine has thick bark to protect the inside layers of the tree. **Periodic** prescribed fire is important for restoring the longleaf ecosystem and many plants and animals that depend on it.

Longleaf Pine Life Cycle