## N.C. State Parks Junior Ranger Program

Longleaf pines, from the smallest seedling to the biggest tree in the forest, are always prepared for fire. Their needles, bark and even how quickly they grow all help them survive in fire. These trees can really take the heat!



Longleaf take on different shapes as they age — these are known as **life stages**. Draw a line to match the picture with it's life stage.

**STAGE 1 - PiNE CONE** 5–12 inches in size

STAGE 2 - GRASS STAGE Can last 1–7 years

## STAGE 3 - BOTTLEBRUSH

Named for its strange bristly look before it grows limbs

**STAGE 4 - SAPLING** Grows up to 3 feet a year

**STAGE 5 - ADULT TREE** Can live up to 500 years!







How do all these different life stages survive a fire? Draw a line to match each stage with what makes them fire resistant.

Grows quickly to get above typical flame heights.

Starts to grow limbs above typcial flame heights.

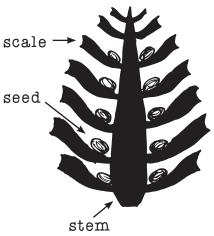
Has thick, flaky bark and drops lower limbs once it gets tall enough.

Long needles and a growth bud cap give protection before the tree can start to grow up from the ground.

Protects the seeds until they drop in the fall.

## NOW LET'S HIT THE TRAILS TO TRY AND FIND ALL THE LIFE STAGES!

Find an area that looks like fire has opened up the understory to let a lot of light in. Young longleaf need these sunny areas to grow!



4. Find a bottlebrush and a sapling. Draw how tall they are compared to you.

5. Find an adult longleaf with black burn marks. Can you reach as high as the black burn marks go?

6. Can your parents reach it?

7. How does the park help longleaf pines grow?

