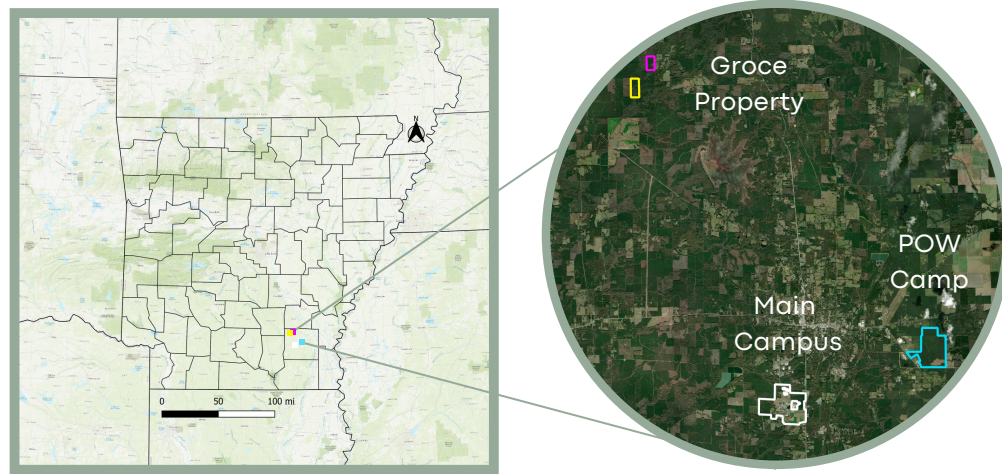


# THE BENEFITS OF TREES ON THE UAM CAMPUS

## University of Arkansas at Monticello

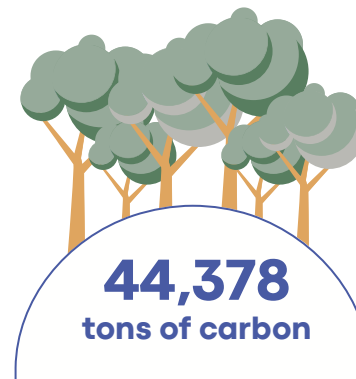
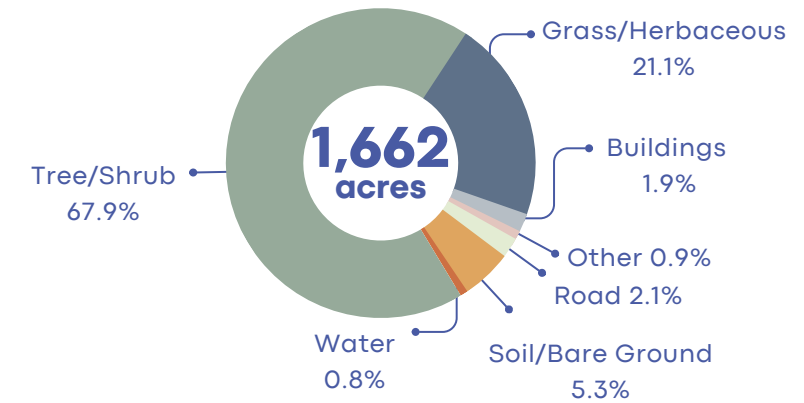
The University of Arkansas at Monticello (UAM), established in 1909, is a public university part of the University of Arkansas System. UAM owns more than 1,650 acres of land, which include three properties: the UAM main campus, Prisoners of War Camp (POW), and Groce Property (north and south blocks). UAM achieved the Tree Campus USA status in 2010 for promoting healthy urban forest management and engaging the campus community in environmental stewardship. Enrolling the campus in such type of program is important because colleges and universities are responsible for about two percent of the total carbon emissions nationwide [1].

### Arkansas (Left) and UAM Properties (Right)



### UAM Properties Land Cover Class

Trees and shrubs are UAM properties dominant land cover type, which is followed by the grass and herbaceous type.



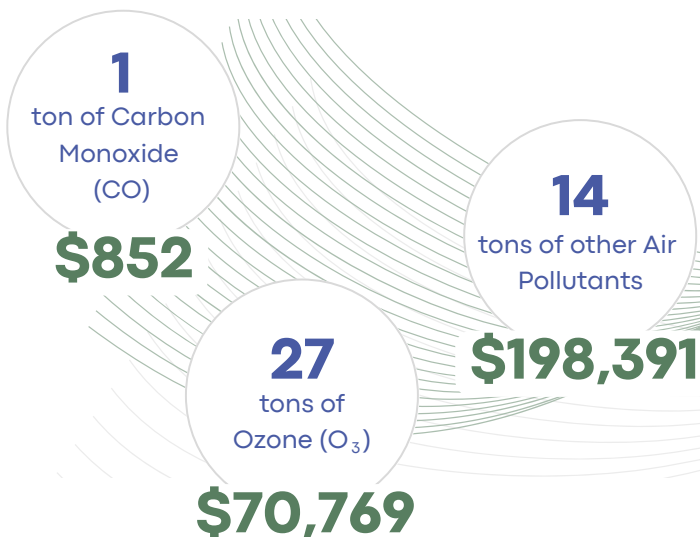
### Total Carbon Storage

**\$6,607,155**

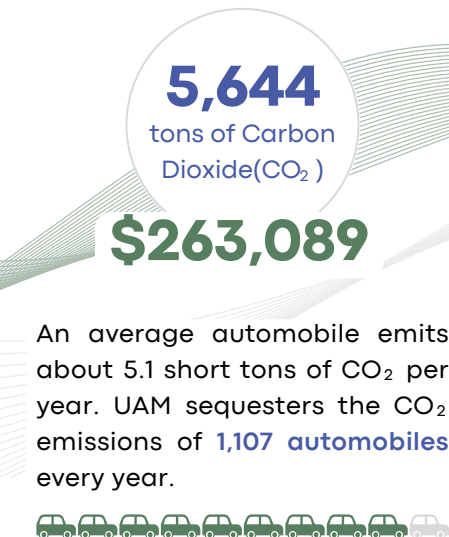
UAM's forest has provided ecosystem services valued in more than \$6 million to its surrounding communities from the storage of about 44 thousand tons of carbon, which is equivalent to almost 163 thousand tons of CO<sub>2</sub>.

### Annual Benefits

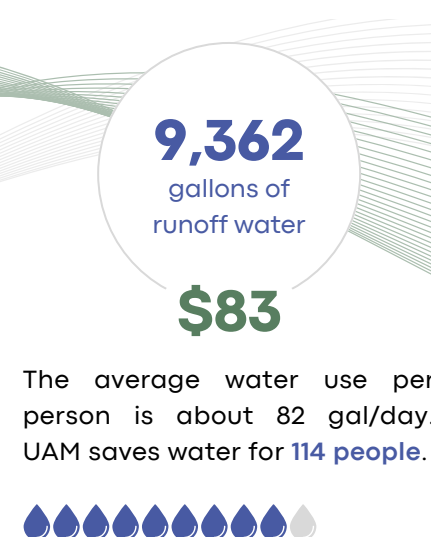
#### Air Pollution Removal



#### Carbon Sequestration



#### Avoid Runoff



### Total Annual Economic Benefits

**\$533,184**

UAM trees remove about **42 tons of air pollutants** (CO, O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM2.5, PM10) from the atmosphere, sequester almost **6 thousand tons carbon dioxide (CO<sub>2</sub>)**, and avoid runoff of more than **9 thousand gallons of water** equivalent to more than **half a million dollars annually** in benefits to the community.

