

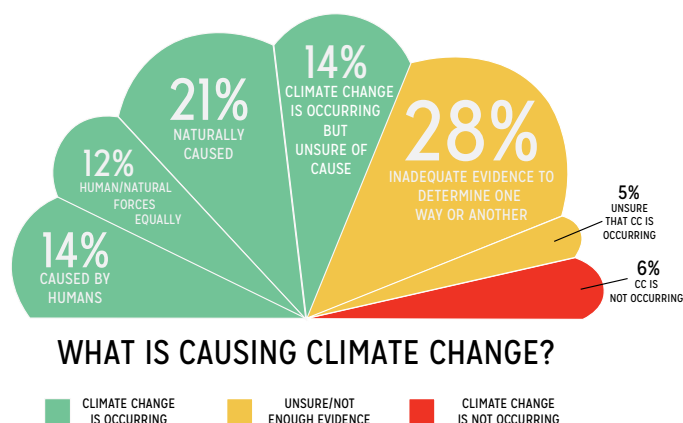


CLIMATE CHANGE ATTITUDES OF SOUTHERN FORESTRY PROFESSIONALS

LESLIE BOBY, WILLIAM HUBBARD, AND SHAFKAT KHAN
UNIVERSITY OF GEORGIA, ATHENS, GA USA [HTTP://SREF.INFO](http://SREF.INFO), SREF@SREF.INFO

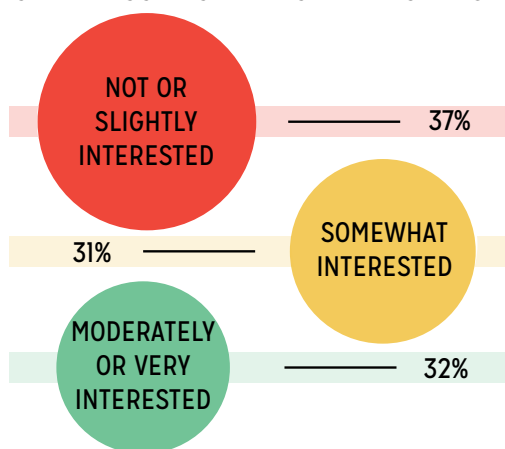


More than 1,200 foresters from the Southern United States responded to a needs assessment survey conducted in early 2013 to determine observations, perceptions, and professional development interests. A sampling of the survey results are shown in the following infographics. Data results give an insight into the differing views on climate change and variability and an idea of what topics professionals would like to see addressed in continuing education programs. For more information about the study and to view state-specific results, please visit <http://www.pinemap.org/extension>.



About 60% of the respondents agree that change is occurring but differ in what they think causes it. About 35% are unsure, or believe there isn't enough evidence one way or another to make a statement. About 6% feel that the climate is not changing.

INTEREST IN LEARNING MORE ABOUT CLIMATE SCIENCE AND CLIMATE CHANGE



While only 25% of foresters feel they are knowledgeable about climate and climate change, about 2/3 are somewhat to very interested in learning more.

Close to half of the forestry professionals surveyed have witnessed climate anomalies firsthand in their lifetimes. These include, more and longer droughts, higher temperatures, and longer growing seasons.

"IN MY LIFETIME, I HAVE NOTICED A CHANGE IN THE CLIMATE."
LEVEL OF AGREEMENT



HOW KNOWLEDGEABLE ARE YOU ABOUT CLIMATE SCIENCE & CLIMATE CHANGE?



Only 25% of respondents feel they are very knowledgeable about climate science and change, a complex geophysical field. Climate change, human dimensions, and the resulting potential for variability in future modeling efforts adds to this complexity.



Increasing forest resiliency is key to climate change adaptation and mitigation. About 2/3 of respondents feel they are not very knowledgeable about forest resiliency strategies. Based on this survey, forest resiliency, as it relates to climate change, is an education imperative for Southern forestry professionals.

KNOWLEDGE OF FOREST RESILIENCY STRATEGIES

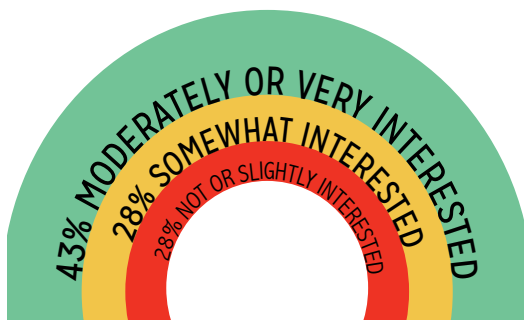


This word cloud shows the top weather and climate-related factors with which foresters are concerned. These include invasive plants, drought, and insect and disease outbreaks. Less important are soil erosion and extreme rainfall events.

These are the phenomena foresters have witnessed in recent times, arranged to reflect frequent or very frequent observation. Similar to what foresters are concerned about, invasive plants and droughts have been observed in greater frequency.

INVASIVE PLANT INFESTATIONS*
LONGER DRY PERIODS AND/OR DROUGHT CONDITIONS
WARMER WINTERS **HOTTER SUMMERS**
EXTREME WEATHER EVENTS*
 DRIER PLANTING SEASONS
INCREASED FREQUENCY OF MORE SEVERE FIRE EVENTS
CHANGE IN LENGTH OF GROWING SEASON
EXTREME RAINFALL EVENTS*
 FLOODING*
INSECT DAMAGE* **DISEASE DAMAGE***
 INCREASED SOIL EROSION
COOLER WINTERS **COOLER SUMMERS**
 WETTER PLANTING SEASONS
 *REFERRING TO GREATER FREQUENCY OF/MORE SEVERE OCCURRENCES OF THESE CONDITIONS

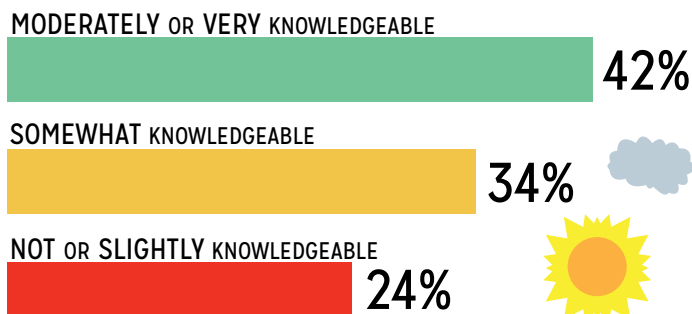
HOW INTERESTED ARE YOU IN LEARNING MORE ABOUT FOREST MANAGEMENT STRATEGIES THAT PROMOTE FOREST HEALTH AND RESILIENCY?



A majority of the foresters surveyed express some level of interest in learning about forest management strategies that promote forest health and resiliency.

Many foresters are interested in learning about weather science and related tools and technologies. Future education efforts should focus on weather science and tools and how these relate to forest resiliency and climate change.

KNOWLEDGE ABOUT WEATHER SCIENCE, INCLUDING FORECASTS, TOOLS, & TECHNOLOGIES

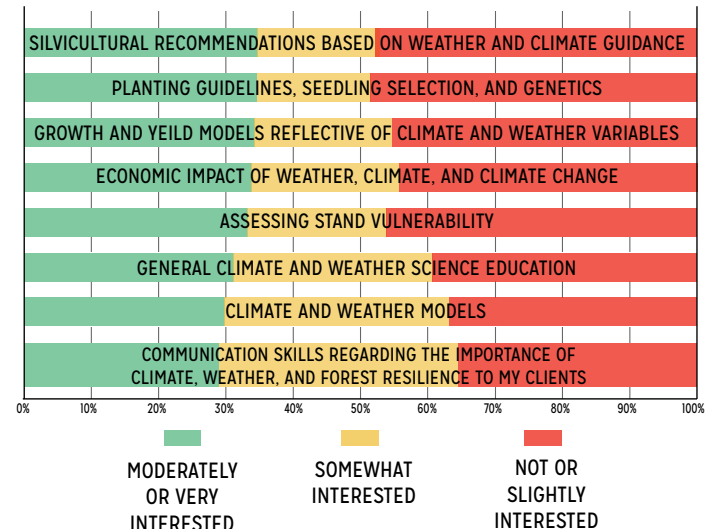


WILLINGNESS TO PARTICIPATE IN THE FOLLOWING TYPES OF LEARNING ACTIVITIES



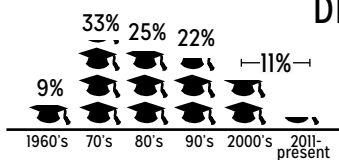
Most respondents prefer in-person workshops or short courses, but many are also interested and willing to participate in self-led or online courses and/or webinars. Of little interest or use to many professionals are correspondence courses and online communities for sharing and interacting with others.

LEVEL OF INTEREST IN VARIOUS FOREST RESILIENCY STRATEGIES

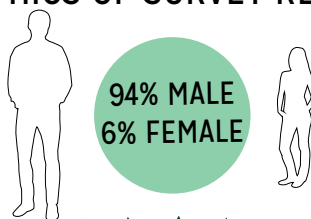


A number of forest resiliency strategies can be incorporated into current forest management practice. Foresters are most interested in silvicultural recommendations in relation to climate, planting guidelines, growth and yield models reflective of climate and weather, and economic impact of weather and climate change.

DEMOGRAPHICS OF SURVEY RESPONDENTS



A LARGE PERCENTAGE OF RESPONDENTS COMPLETED THEIR EDUCATION IN THE LATE 1970's. CONVERSELY, THERE WERE FEWER GRADUATES FROM THE PAST SEVEN YEARS WHO RESPONDED.



MOST HAVE A BACHELOR'S DEGREE IN FORESTRY; ABOUT 23% HAVE A MASTER'S DEGREE; AN ADDITIONAL 9% HAVE DOCTORATES.



A LITTLE MORE THAN 10% OF RESPONDENTS HAVE WORKED IN THE PROFESSION FOR TEN YEARS OR LESS; ABOUT 20% HAVE WORKED 11-20 YEARS; 26% HAVE WORKED FOR 21-30 YEARS; ABOUT 34% HAVE WORKED 31-40 YEARS; LESS THAN 10% HAVE WORKED FOR MORE THAN 40 YEARS.