



Warnell School of Forestry & Natural Resources UNIVERSITY OF GEORGIA

Conference on advancing southern tree genetics celebrates platinum anniversary

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Seventy years ago, it was a call to arms. The cold war was swirling, and the focus was on building up our defenses.

Trees, it seemed, played a role in this effort.

“Certainly, throughout this effort to re-arm and to mobilize to meet the threat of aggression, our forests will be called upon to do their part,” read the introduction to the first-ever meeting of southern forest geneticists on Jan. 9, 1951, in Atlanta. “Our forest planting must go ahead in order that we may be prepared to meet emergencies of the future. We must apply scientific principles to the planting and the nurture of these crops.” What was to follow would be a biennial tradition that connected scientists with a focus on tree genetics. Now known as the Southern Forest Tree Improvement Conference (and managed by the Southern Forest Tree Improvement Committee, both using the same acronym of SFTIC), the event recently celebrated its 70th year with an event that is as much an indicator of the current times as the advances in technology: A virtual conference.

“It’s almost all research aimed at tree breeding to improve the quality, growth rates and health of our southern forests. Up until relatively recently it was mostly focused on Southern pines, but there’s been some interest in hardwood species and non-commercial species,” said Scott Merkle, a tree geneticist at the University of Georgia Warnell School of Forestry and Natural Resources, which hosted this year’s conference.

Over the years, the committee has kept [extensive records of meetings and presentations](#) through digital archives and compiling two histories—one covering 1951-1971 and from 1971-1981. Fred Raley, a geneticist for the Western Gulf Tree Improvement Cooperative at Texas A&M University who also serves as historian for SFTIC, also has the plaque given to the organization to commemorate its significance at the UGA Center for Continuing Education and Hotel.

As it happens, the fourth meeting of SFTIC was in 1957 in Athens, and it was the first conference hosted by the new campus conference center. When the event returned to Athens in 1983, someone had the idea to commemorate the 1957 conference with a plaque. It was displayed at the Georgia Center for years but was removed during a renovation. Merkle set out to track it down.

“Somehow word got out that I was looking for it,” said Merkle, who tracked the plaque to a supervisor’s office at the center. “She allowed me to take a picture of it but didn’t want to give it up. When she retired, this package showed up in my mailbox and the plaque was in there. I sent it to Fred for safe keeping since he’s the SFTIC historian.”



Over the years, the conference proceedings mirror the times. Seed generation, pollination and growth models are perennial topics. Sessions have focused on managing pests, breeding techniques and tips for nurseries. But in addition to the practical sessions, topics also cover theoretical applications. Decades ago, the scientists discussed quantitative genetics. More recently, the focus has shifted to molecular genetics.

“And the whole purpose of the conference was to bring the few geneticists at the time together and develop their technology and expand the knowledge of forest genetics across the South,” said Raley. “It’s usually a three- or four-day conference with concurrent sessions and a lot going on all at the same time, so you have an opportunity to learn about a lot of different things.”

More typical years also see a dinner and a social gathering for poster presentations. This year, to help encourage participation from younger researchers, SFTIC was able to offer prizes and other incentives to presenters. In lieu of in-person poster presentations, this year’s virtual event included “lightning” presentations, and Warnell master’s student Mason Richins received the top prize among students for his work on ash clonal propagation.

While the events aren’t huge—at its height, the conference topped out at more than 200 participants in 1997—the shared connections among the attendees allow for collaboration and a genuine exchange of ideas. The next event takes place in 2023 at Oak Ridge National Laboratory in Tennessee, and Merkle is hopeful it will be in-person.

“The central core is genetic improvement and understanding genetic variation in southern forests,” said Merkle. “I’ve met some great collaborators at SFTIC who made a huge difference in my research program.”

Source: <https://www.warnell.uga.edu/research/news/conference-advancing-southern-tree-genetics-celebrates-platinum-anniversary>