

ASSESSING TREE DECAY BIOLOGY, BIOMECHANICS AND RISK

Understanding biomechanical principles and biology
in relation to assessing Trees for Decay

April 11 and 12, 2024

RI College, Student Union Building

Join us for 2 days with **Frank Rinn** and **Dr. Chris Luley** who will show us what's really going on inside decaying trees. Using the most advanced technology (the Arbortom sonic tomography system, Resistograph resistance drill, DNA testing) and the most basic (a mallet, our eyes and our ears), these experts will demonstrate the best methods available for decay assessment.

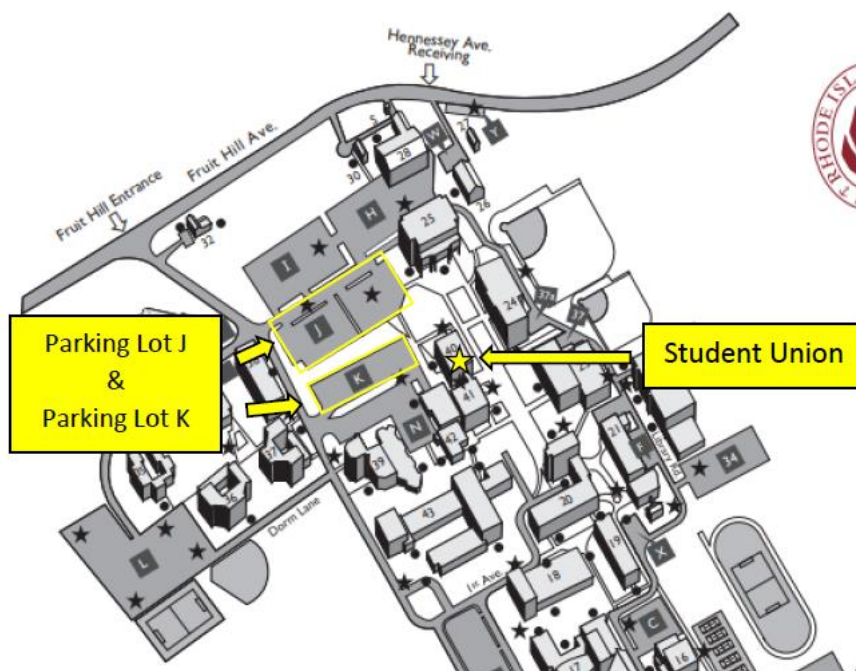
Dr. Luley will discuss fungal identification, biology and life cycles. He will explain how different decay organisms interact with their tree hosts and what we can do to manage them.

Frank Rinn will discuss tree biology and biomechanics, and how breaking forces act on trees in various states of decay. Together these experts will explain how we can use this information to manage trees with decay more effectively.

**SPONSORED BY: RIDEM Division of Forest Environment
Urban & Community Forestry Program**

**Registration provided by: RI Tree Council – *online registration only*
Limited to 75 attendees, so register early
*ISA CEUs:***

See agenda and speaker bios below



DAY 1

Time	Speaker	Topic
8:00 to 8:20 am		Registration & Coffee
8:20	Lou Allard, DFE	Welcome
8:30	Chris Luley, <i>Ph.D. Urban Forest Diagnostics LLC</i>	Assessing Trees for Decay
9:20	Frank Rinn, <i>Inventor of Resistograph and Arbotom</i>	Wood anatomy, wind-load and basic tree biomechanics.
10:30	Break	Break
10:45	Chris Luley <i>Naples, NY</i>	Biology of Decay Fungi: Decay types, Life cycles, and Fruiting
11:35	Frank Rinn <i>RINNTECH, Germany</i>	Shell-wall thickness and breaking safety of mature trees
12:25		Lunch
1:10	Frank Rinn and Chris Luley Outdoor Session	Frank Rinn and Chris Luley will demonstrate tree assessment using their basic and advanced testing methods including visual, sounding, DNA testing, resistance drilling (Resistograph)
2:30	Break	Return to Class
2:45	Frank Rinn	Basics, Possibilities and Limitations of Tree Inspections
3:35	Chris Luley	Introduction to TreeRot.com and Identification of Common Decay Fungi, what they mean to stability
4:25	Nancy Stairs, DFE	Wrap up/Evaluations

DAY 2

Time	Speaker	Topic
8:00 to 8:20 am		Registration & Coffee
8:20	Lou Allard, DFE	Welcome
8:30	Chris Luley	Decay Fungi Identification: Part 2
9:20	Frank Rinn	Advanced Tree Biomechanics
10:30	Break	Break
10:45	Chris Luley	Root Decay Fungi Identification, Assessment and Management
11:35	Frank Rinn	Calculating tree-safety?
12:25		Lunch
1:10	Frank Rinn and Chris Luley Outdoor Session	Frank Rinn will demonstrate tree assessment advanced testing using sonic tomography (Arbotom)
2:30	Break	Return to Class
2:45	Frank Rinn	Basics, Possibilities and Limitation of Tree Inspections
3:35	Chris Luley	Does Biology Trump Biomechanics?
4:25	Local Folks	Wrap up/Evaluations

SPEAKER BIOS

Dr. Chris Luley has a 40+ year career in urban forestry and arboriculture. He is the former State Forest Pathologist for the Missouri Department of Conservation and ran the Plant Diagnostic Clinic at Iowa State University. He is currently based in upstate New York and operates Urban Forest Diagnostics (<https://chrisluleyphd.com/>). His book “Wood Decay Fungi” is well known to many arborists and his collaborative website www.treerot.com is a popular resource. He is a recipient of the R.W. Harris Author’s Award from the International Society of Arboriculture and the Lifetime Achievement Award from New York State Arborists, ISA Chapter, Inc. and Author Award from the Midwest Chapter of ISA.

His book Wood Decay Fungi Common to the Northeast and Central United States, 2nd Edition is included as part of your registration fee – see the sample pages attached.



Frank Rinn, inventor of the RESISTOGRAPH® and ARBOTOM®, owns RINNTECH, a company that develops equipment for dendrochronology, tree and timber inspection since 1988.

Frank invented and developed different methods, machines, and computer programs for various applications in tree-ring analysis, dendrochronology, tree, and timber inspection, such as resistance drilling, sonic tree tomography & root-plate detection, as well as wood surface density analysis. He was granted several national and international patents and trademarks such as on high resolution

and high-precision resistance drilling (RESISTOGRAPH®) and sonic tomography (ARBOTOM®). For his inventions and developments, he received several research and innovation awards (1989, 1992, 1997, 1998, 2004, and 2012). Besides managing RINNTECH (manufacturing, selling, and training), Frank also works as a court registered expert, inspecting trees and timber (structures). In addition, he lectures and has published several dozen papers on various topics.

REGISTRATION: includes Dr Luley’s book, a \$65 value, see sample pages below

Rhode Island Licensed Arborist – early bird to Dec 31 2023 \$125

Rhode Island Licensed Arborist – after Dec 31 2023 \$150

Non-RI Licensed Arborists - \$175