# **Diagnostic Tools of the Trade**

When attempting to diagnose a tree disorder or when identifying specific insects or diseases, it is useful or necessary to have certain tools and equipment available on-site. When conducting a tree inspection or diagnosis, many foresters come prepared by carrying a bag of commonly used tools and sample collection equipment. The following is a list of tools and equipment that you can include in your own diagnostic bag. The time and effort it takes to gather and organize this equipment will be rewarded when you show up at a site prepared and professional.

You may find it useful to store this equipment in a crate, backpack, shoulder bag, or even a tackle box. Smaller items can be carried with you in a bag or small tool tray; larger items can be stored in a designated container in your vehicle and removed when necessary.

#### **Tools**

Duck-billed Spade (Drain Spade) Garden Spade Hand Trowel Hatchet Machete Draw Knife (Bark Knife) Handsaw Pruning Shears Loppers Pole Saw / Pruner Pocket Knife Tool Disinfectant Rope Binoculars

# **Dissecting Kit**

Forceps (Various sizes) Small Scissors Pointed Probes Razor Blades / Scalpels Hand Lens / Magnifying Glass Small Brush

# **Measurement Tools**

D-Tape Ruler Clinometer Increment Borer Increment Core Case Compass

# **Reference Material**

Pest Control Manual Insect Identification Guide Disease Identification Guide Weed Identification Guide Tree Identification Guide NC Agricultural Chemicals Manual Pamphlets/Brochures Business Cards

# **Sample Collection**

Glass Vials (Various sizes) Plastic Vials (Various sizes) Kill Jars Plastic Sealable Bags Paper Bags Paper Envelopes Small Plastic Containers Bottle of 70 percent Alcohol Small Cooler Ice Packs Soil Sample Boxes Butterfly / Insect Net Duct Tape Clear Tape

# **Data Collection**

Notepad Sticky Labels NCDA Soil Sample Forms NCSU Insect and Disease Clinic Forms NCDA Plant Tissue Analysis Forms NCDFR Pest Control Worksheets Permanent Markers Pencils Flagging Tape Colored Marker Flags GPS Unit Digital Camera

# **Personal Protection Equipment**

First Aid Kit Leather Gloves Protective Eyewear Hard Hat Latex Gloves Hand Sanitizer Poison Ivy Soap & Treatment Sting Relief Pads Rubber Boots Bottled Water