# Forestry Tools

#### Abney Level

Measures slope of the ground and tree height.



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#### Altimeter

Measures elevation or altitude.



#### **Backpack Fire Pump**

Manually operated water pump for fighting forest fires.



#### Bark Gauge

Determines the thickness of tree bark.



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#### **Biltmore Stick**

Measures tree diameter, log height, and the volume of timber in a tree.

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#### **Caliper Tree**

# Measures the stem diameter of small trees.



#### Cant Hook

# Used to roll or turn logs.



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#### Chainsaw

Manually felling trees, delimbing and bucking.



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#### Chainsaw Chaps

Reduces impact of running chainsaws, protecting workers.



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#### Clinometer

Measures tree height and slope of the ground.



#### Cruising Vest

Used to carry forestry equipment for field work.



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#### **Diameter Tape**

Measures the outside diameter of the main stem of trees.



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# **Drip Torch**

Starts controlled prescribed burns in forests and prairies.



#### Fiberglass Tape Measure

Measures horizontal distance.



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#### Fire Rake

Removes leaf litter and duff to create fire lines.



#### Fire Swatter

Extinguishes slow spreading ground fires.



#### Fire Weather Kit

Instruments used to measure weather conditions and determine danger risk levels for forest fires.



#### Haga Altimeter

#### Measures tree height and ground slope.



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#### Hand Level

#### Determines horizontal level.



#### Helmet System

Combination hard hat, ear and eye protection required in logging.



# Hip Chain

Measures distance over any terrain and through forests.



#### Increment Borer

Extracts small cylinders of wood from the bark to pith of a tree. Used to age and determine growth of trees.



#### Level Rod

Graduated measuring rod used in determining differences in elevation between two points.



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#### Lumber Stick

Measurers the number of board feet in a piece of lumber.



# Log Scale

Measurers board foot lumber volume in logs.



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# Mirror Sighting Compass

Navigation tool used for determining direction.



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#### Planimeter

Used to determine acreage from a map by tracing the perimeter on a scaled map.



# **Plastic Flagging**

Used to mark an area or object (ex. flag a tree).



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#### Pulaski Axe

An axe and grubbing hoe tool that can trench and cut roots commonly used in fighting wildlfires.



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#### Safety Glasses

Personal protective equipment used to protect the eyes from debris an impact.



#### **Tree Caliper**

Measures tree diameter very accurately.



#### Tree Injector

# Tool used to inject a chemical into the stem of a tree.



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#### Tree Marking Gun

Sprays paint on trees to mark boundaries and sale trees.



### Prism

Angled glass tool used in forest inventory operations.



Photo Credit http://www.cspoutdoors.com

#### Relaskop

Used to take individual tree diameters and heights during forest inventories.



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#### Staff Compass

Traditional compass used to survey forests and fields.



#### **Timber Cruising Computer**

Handheld computer used to record forest inventory data.



Photo Credit: www.trimble.com

# GPS Unit (Global Positioning System)

Handheld, satellite based device used to determine location data.



Photo Credit: www.trimble.com

#### **Tree Planting Bar**

Tool used to create a narrow opening in the ground for planting bare-root tree seedlings.



Photo Credit: www.forestry-suppliers.com

### GIS

### (Geographic Information System)

A digital system used to manage, analyze, and display geographic information.



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