

Spruce Winter Injury Impact Survey

Objective: To evaluate the impact of winter injury on affected red spruce.

Time of Year: Late Spring

Equipment: D-tape, 10 BAF prism, compass, arctic flagging, metal tags, aluminum nails, transparency cards, species codes, VT Atlas and & Gazeteer, topo map

Site Selection: Two per district. Choose accessible areas that received substantial damage and that shouldn't be cut in the near future (approx. 5 years).

Plot Establishment: 5 prism points laid out in the cardinal directions, center points 2 chains apart (1-N, 2-E, 3-S, 4-W, 5-C).

Plot Data: Assign a unique location name to each plot. Record the first 3 digits for the Vt Atlas Grid and elevation to the nearest 100'.

Point Data: Aspect in degrees azimuth.

Tree Data: Only red spruce will be permanently marked, consecutively numbered, and reevaluated in the future.

All Trees:

Species from forest health monitoring field guide (red spruce=097, balsam fir=012).

Live/Dead - Live (L) or Dead (D)

All Conifers:

Winter Injury Present (1) or Absent (0).

Red Spruce Only:

Crown Class Open Grown (1), Dominant (2), Codominant (3), Intermediate (4), Suppressed (5)

DBH Nearest inch

% Dieback & % Transparency In 5% increments using FHM standards (5=1-5, 10=6-10, etc.)

% Discoloration & % Defoliation In 5% increments using FHM standards, except record discoloration even if less than 30%.

Bud Mortality >30% of tree without current growth (1), <30% of tree without current growth (0).

