



UNIVERSITY OF
EASTERN FINLAND


Forest stand variables affecting break and uproot of trees after the occurrence of wind and snow damage

Olalla Díaz-Yáñez,

Blas Mola-Yudego, Jose Ramón González-Olabarria, Timo Pukkala



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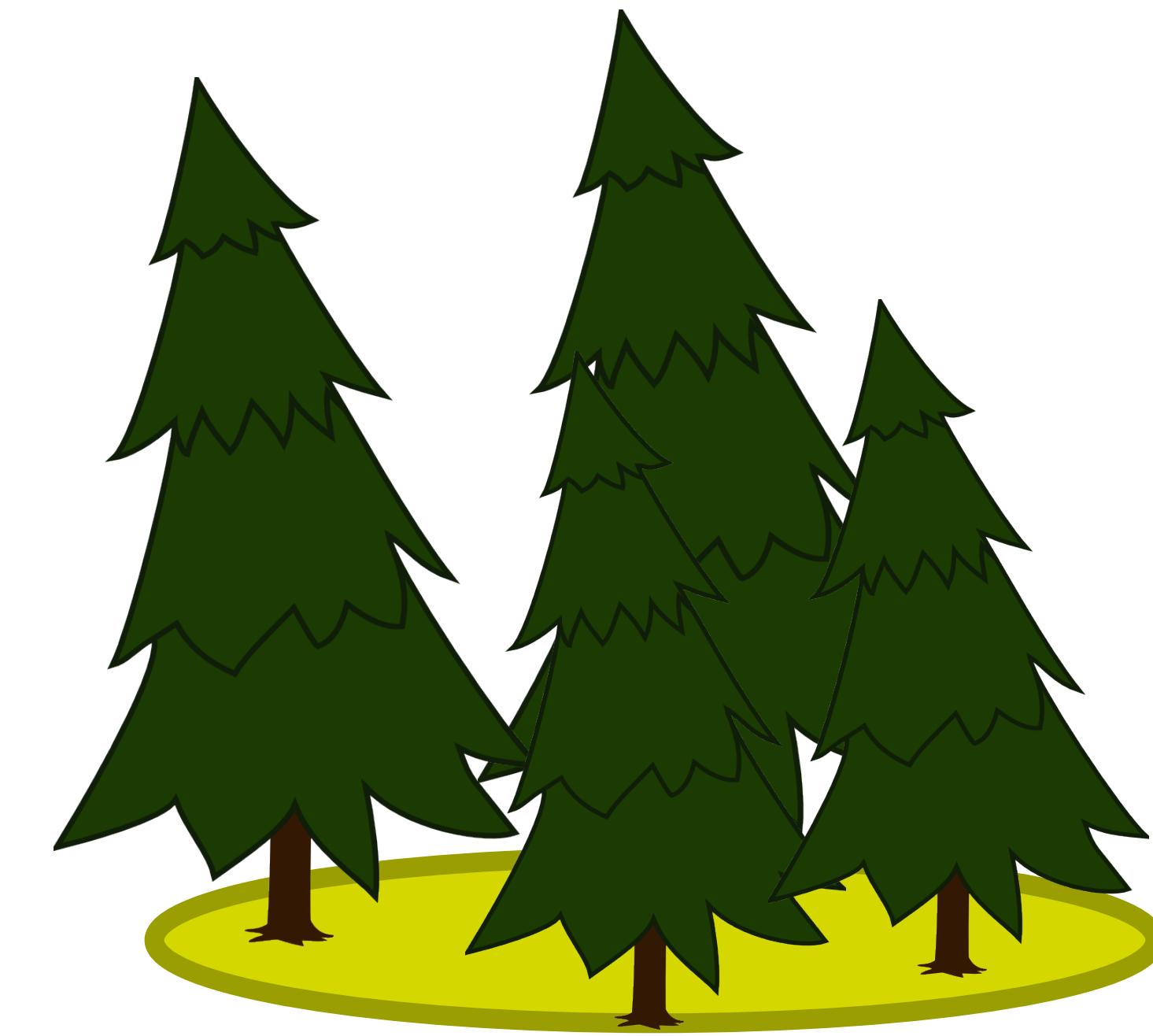
Ecology

Economy

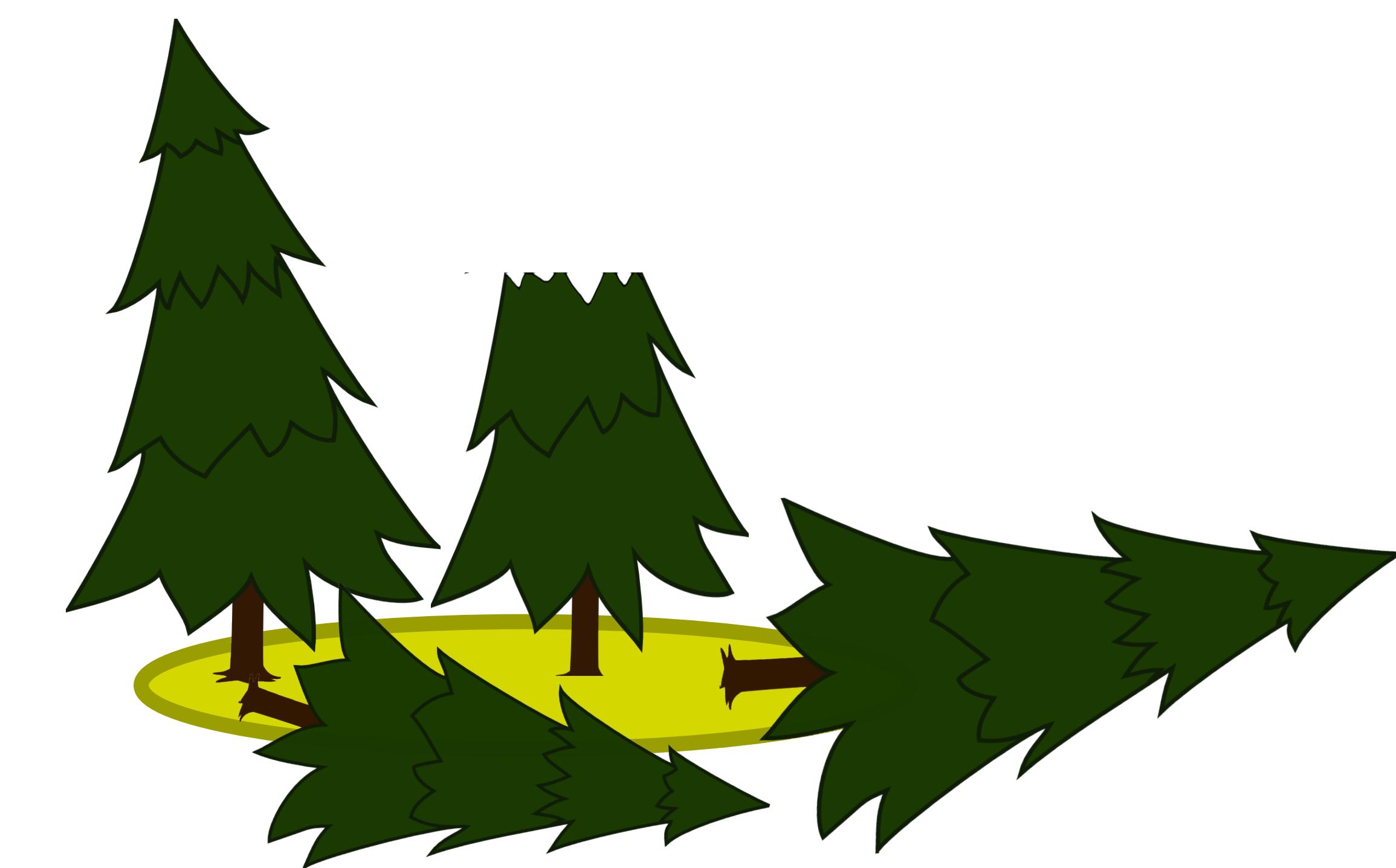
Wind and snow
damages

Step 1:

Damage occurrence



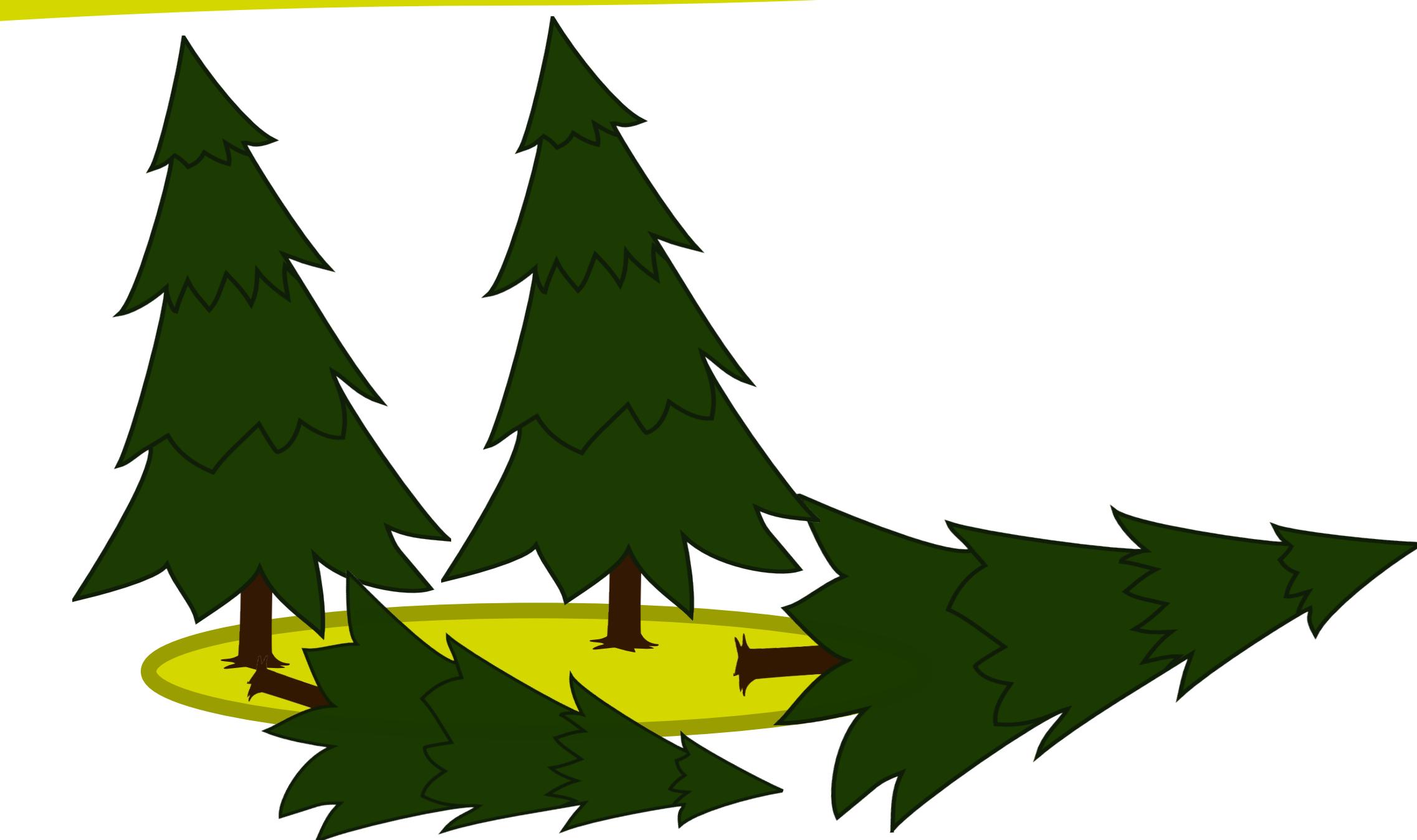
Undamaged



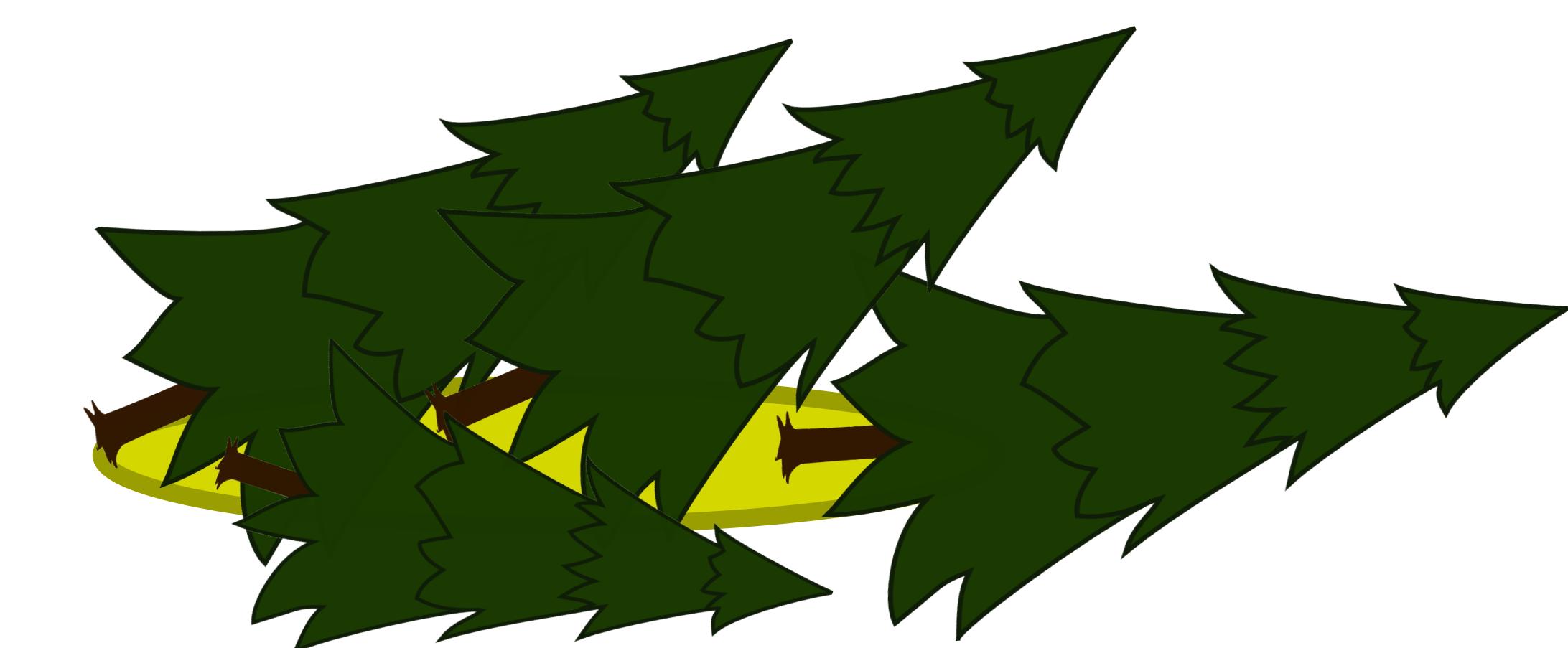
Damaged

Step 2:

Damage level

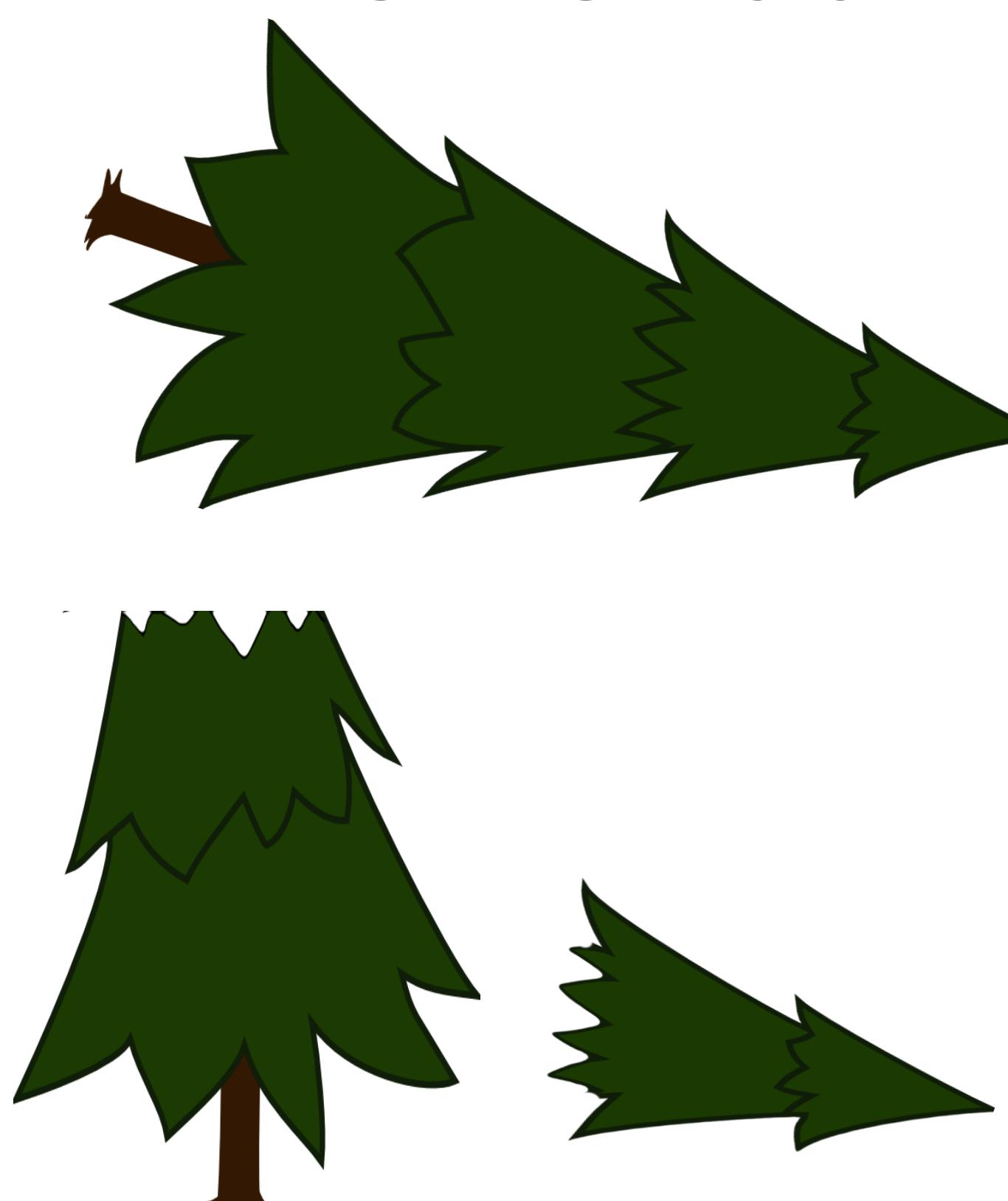


Lower damaged level



Higher damaged level

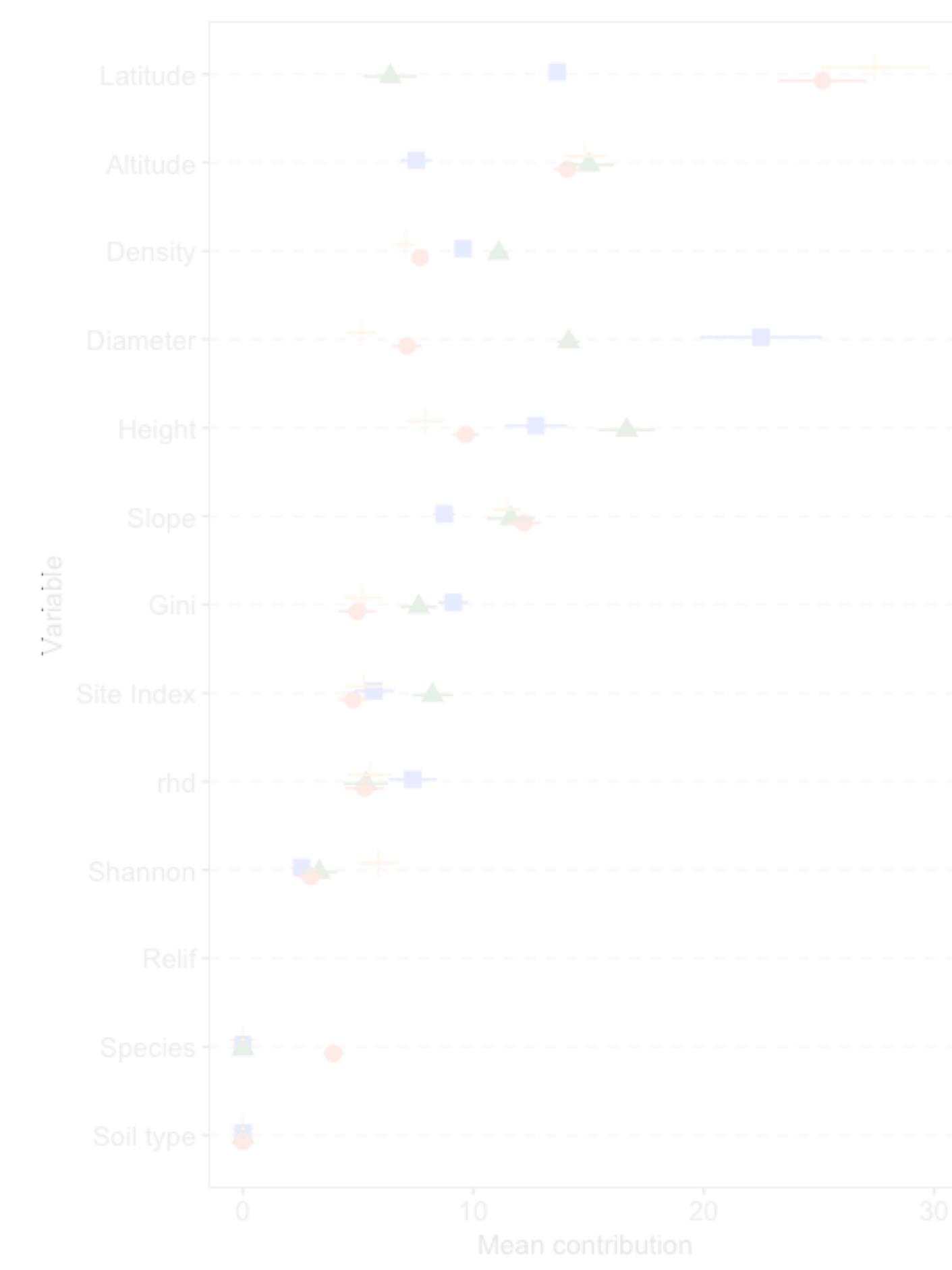
Damage type



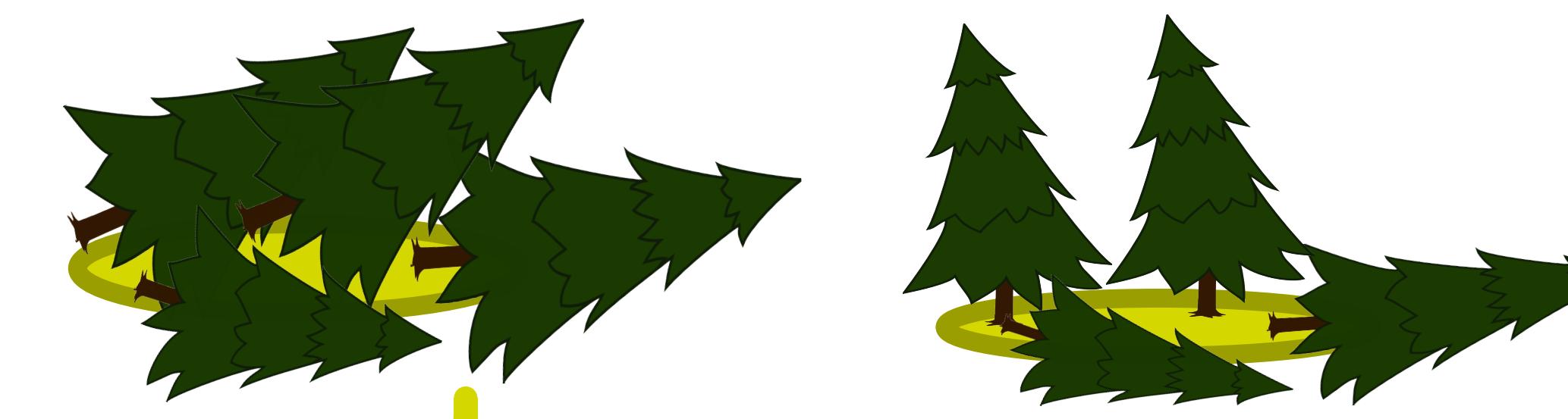
Uprooted

Broken

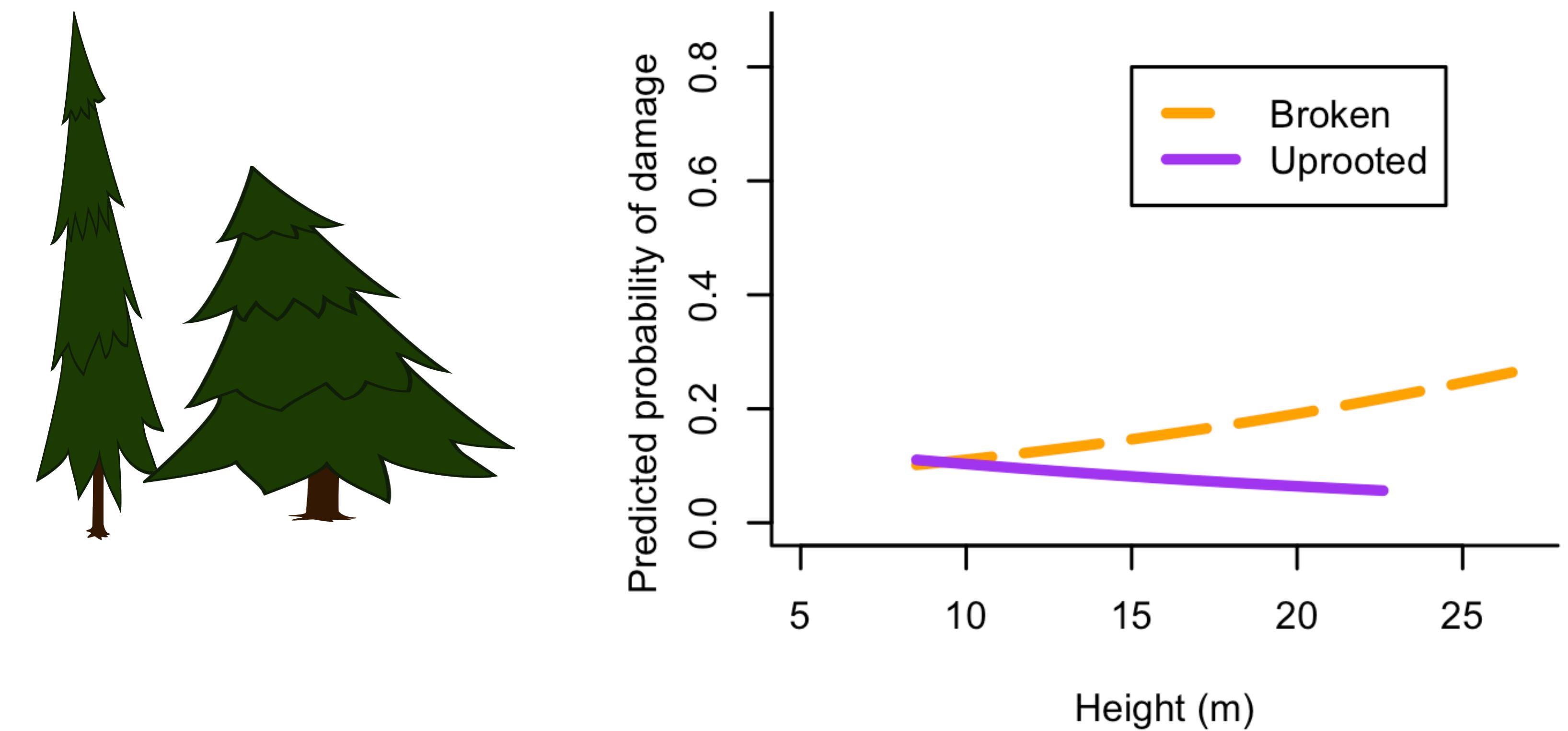
Step 1: Damage occurrence



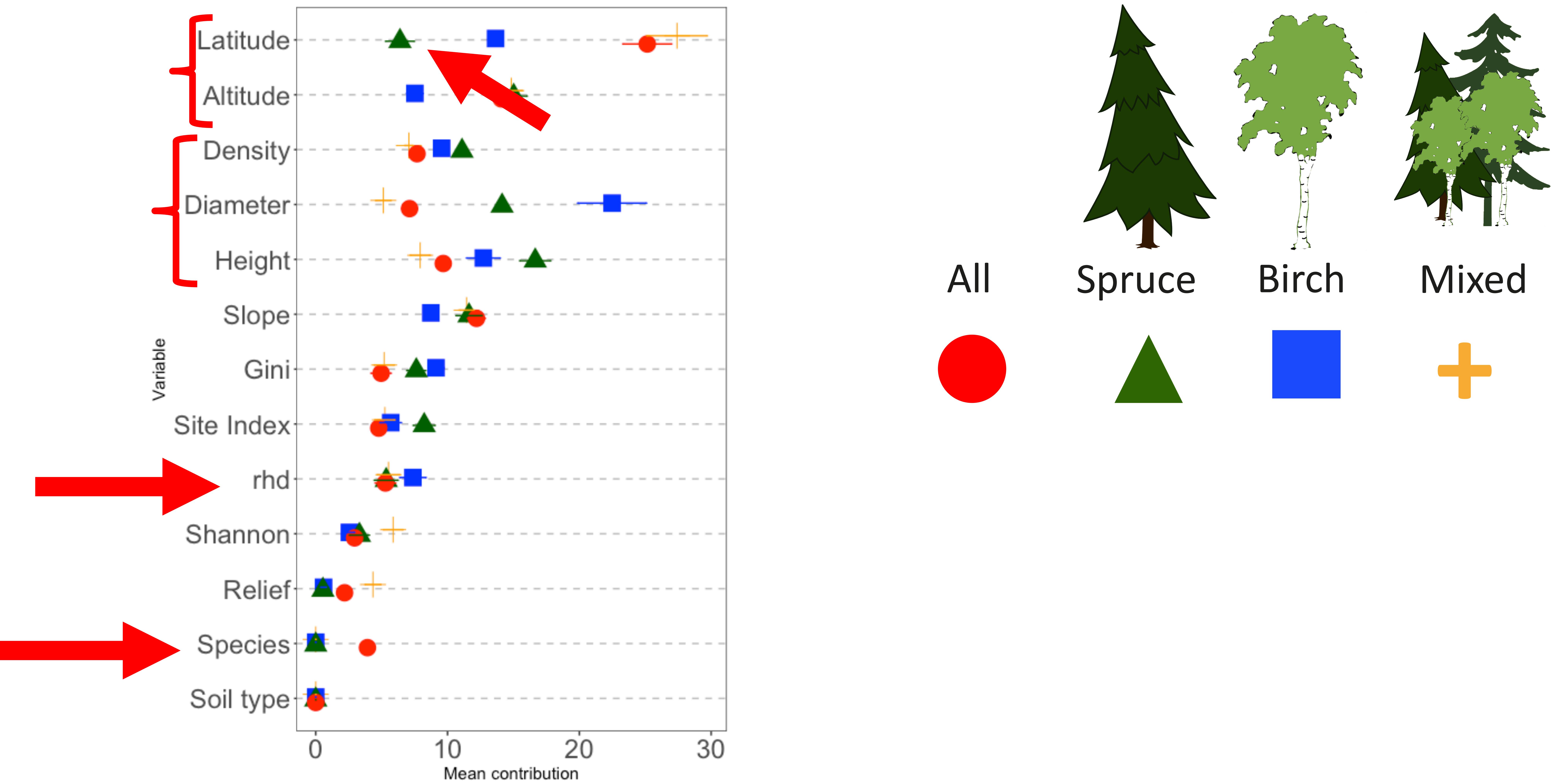
Step 2: Damage level



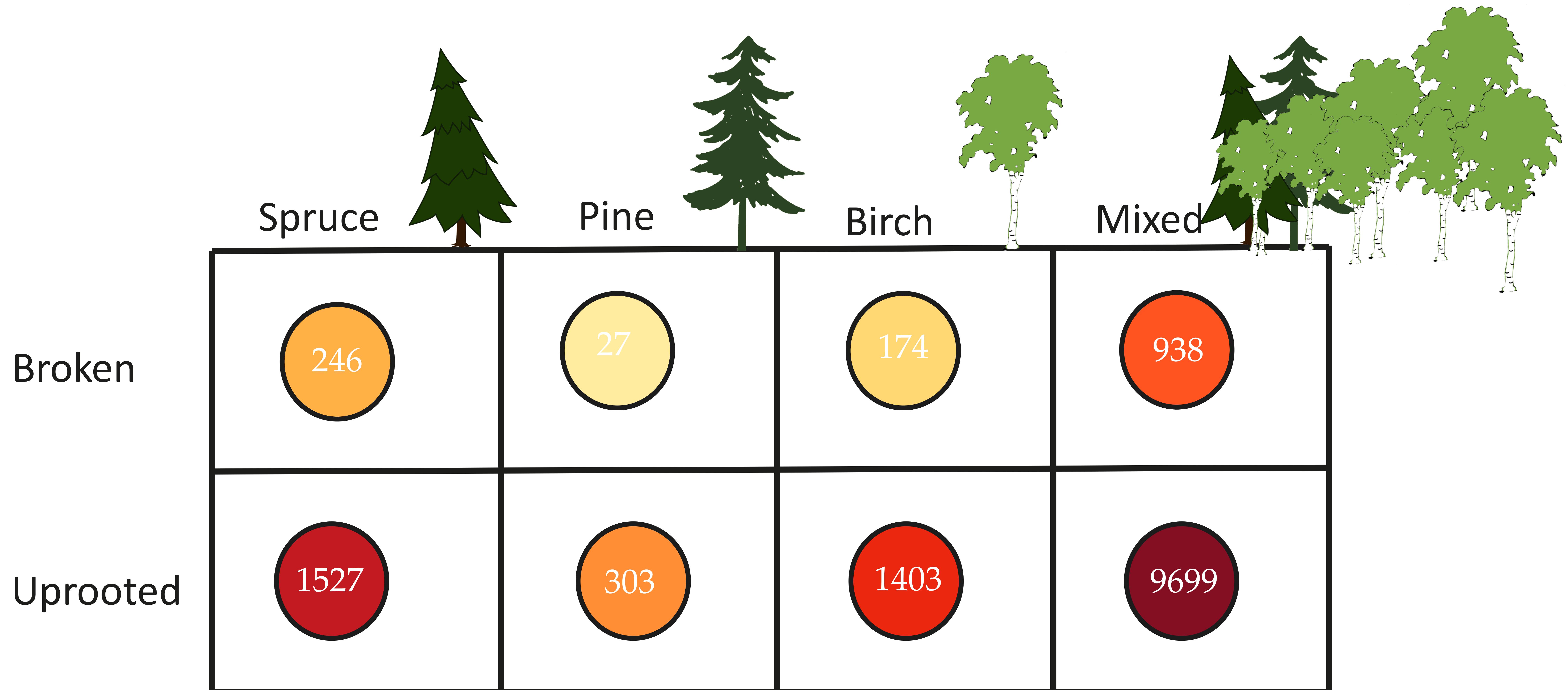
Slenderness, height, diameter, basal area



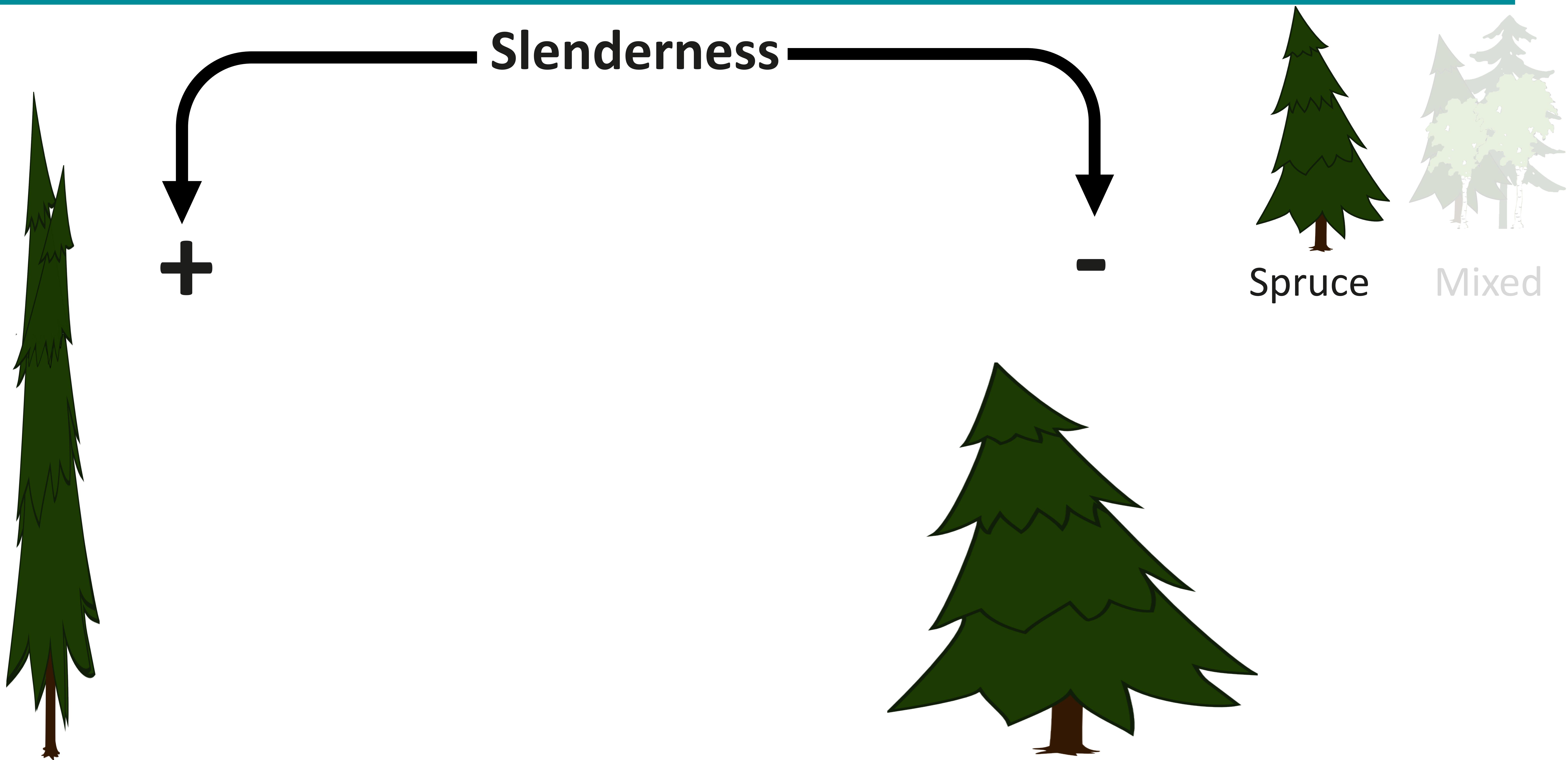
Variables describing composition and site are helpful to evaluate damage occurrence



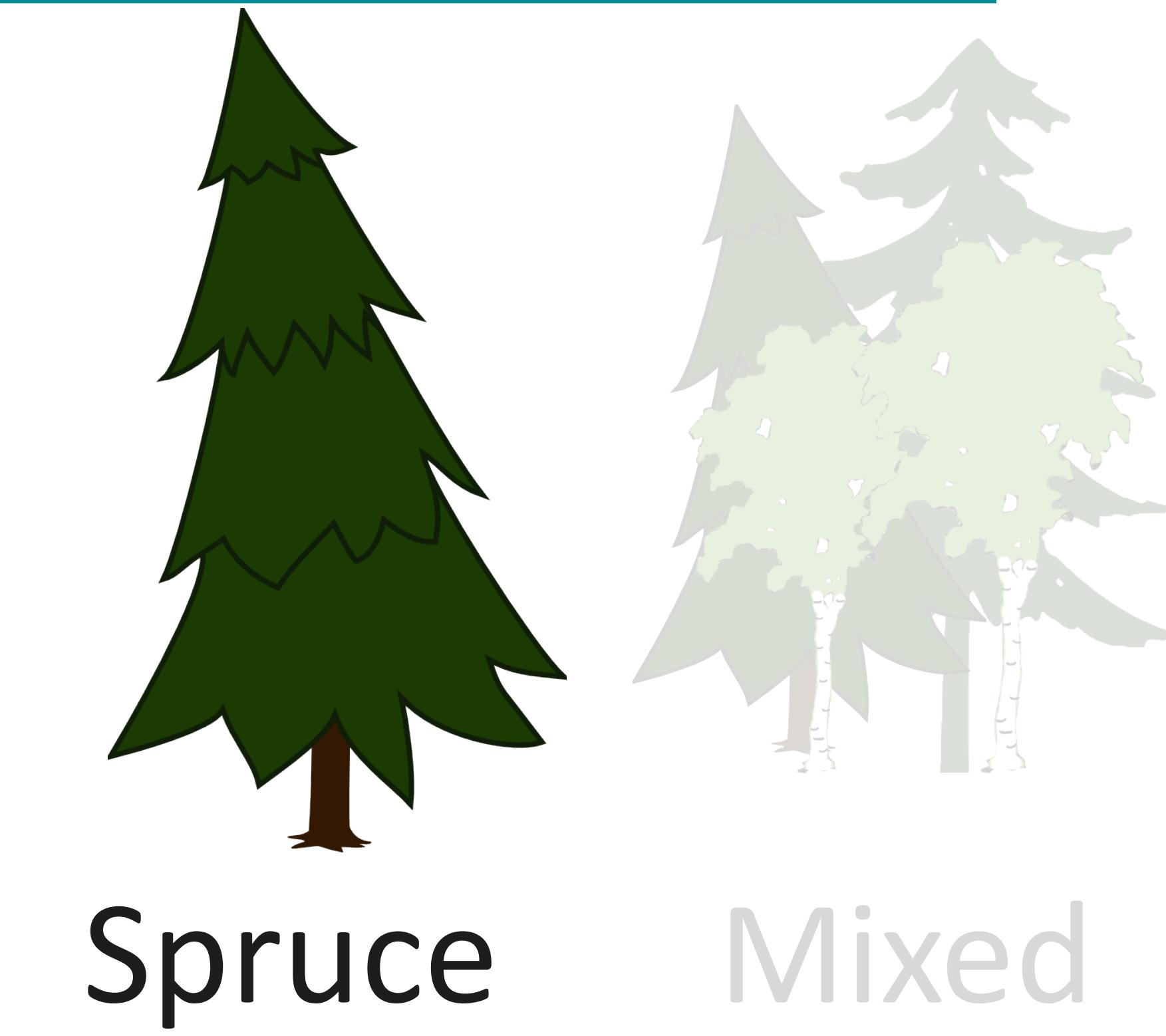
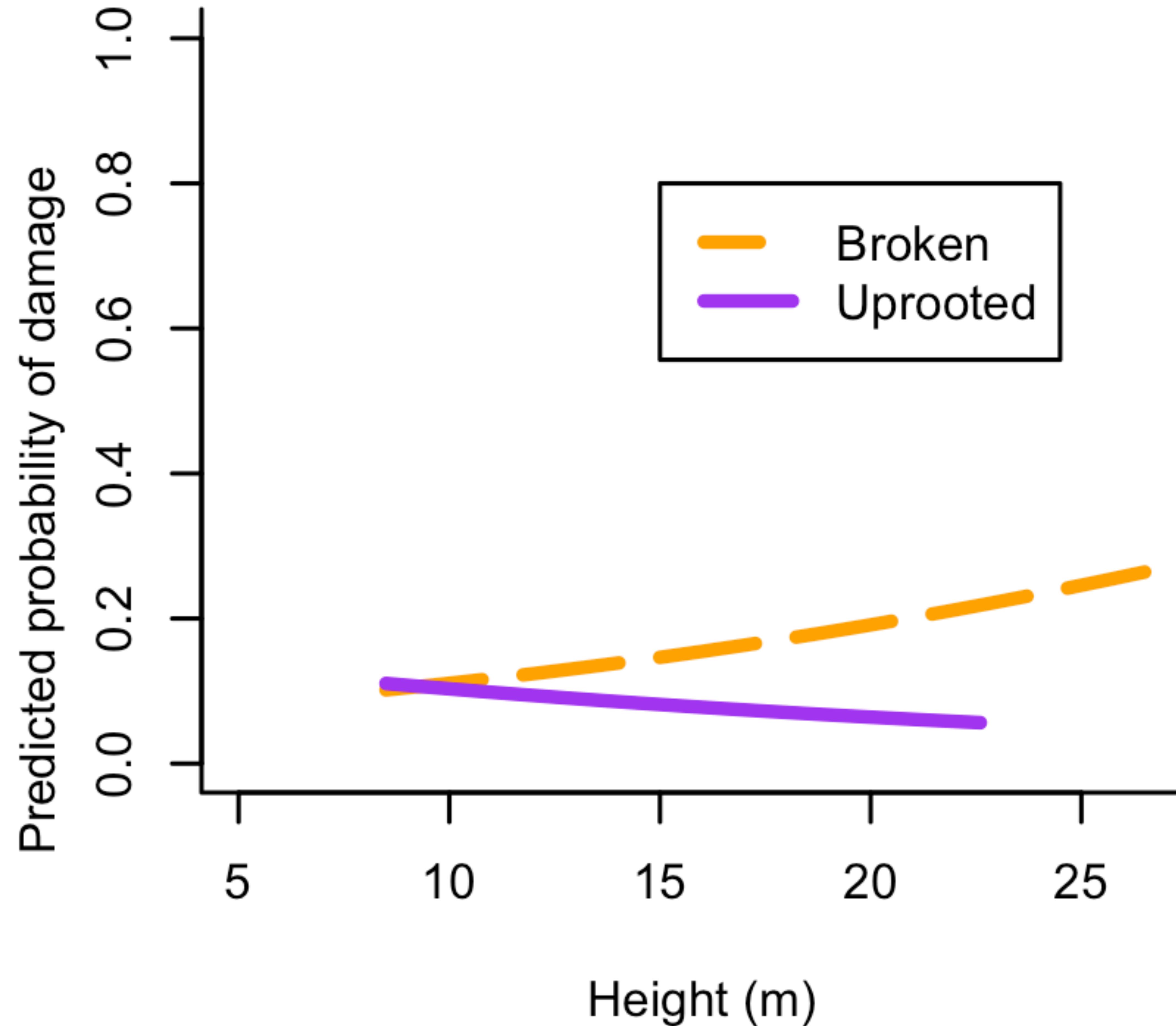
Species dominance plays an important role in the damage type



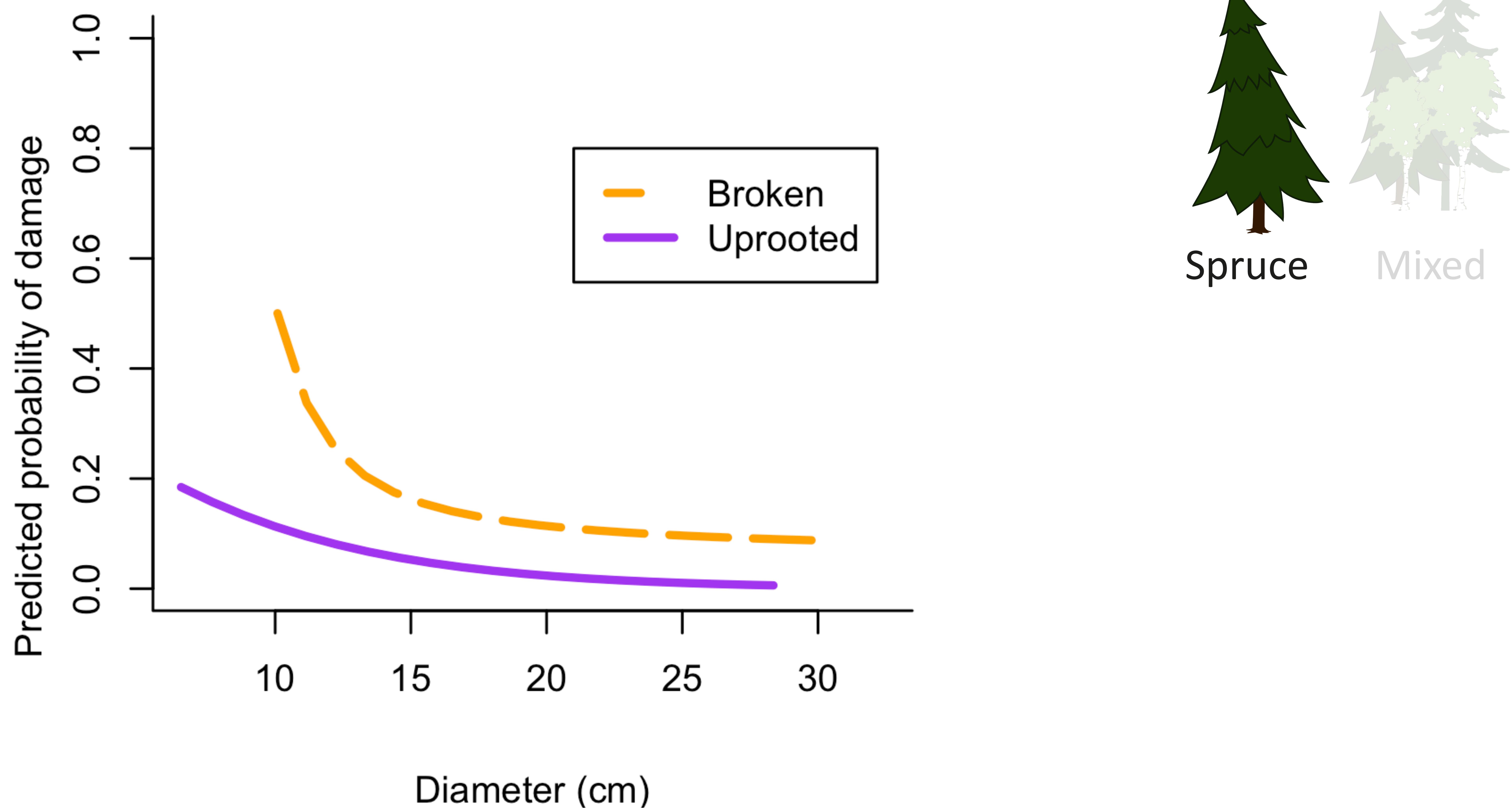
Slender trees are more prone to break than uproot



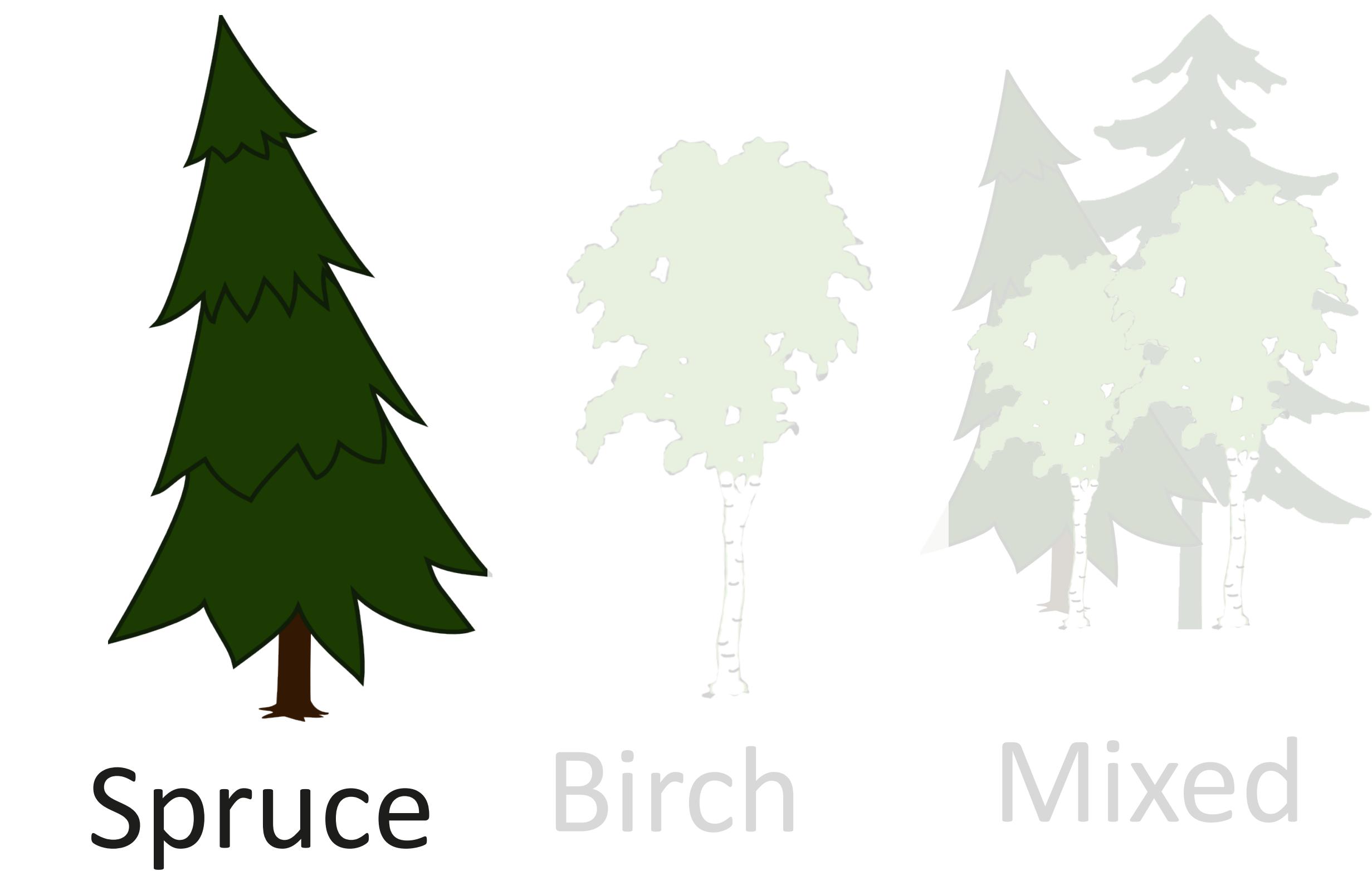
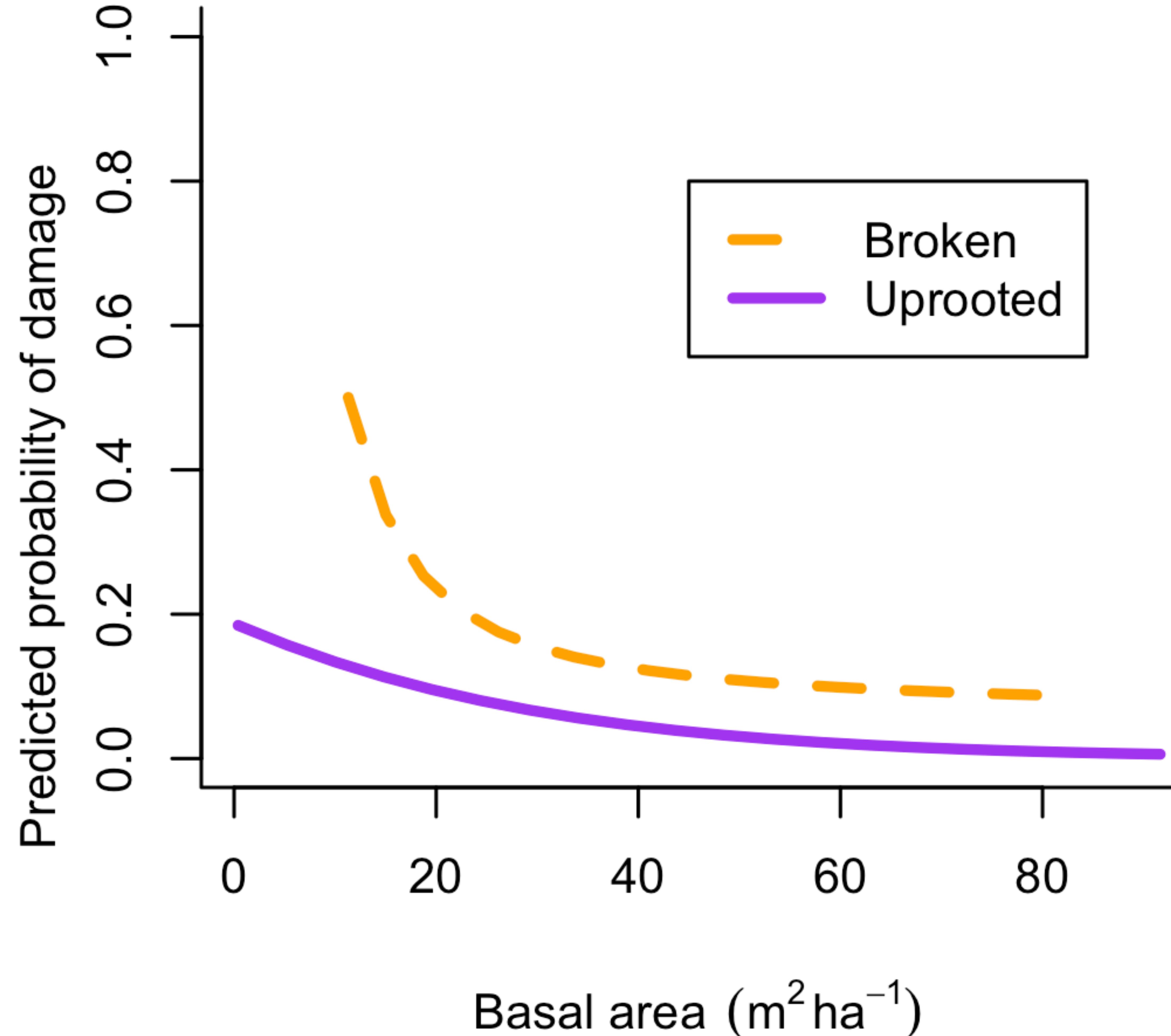
Increasing height is associated with increasing probability for a tree to be broken



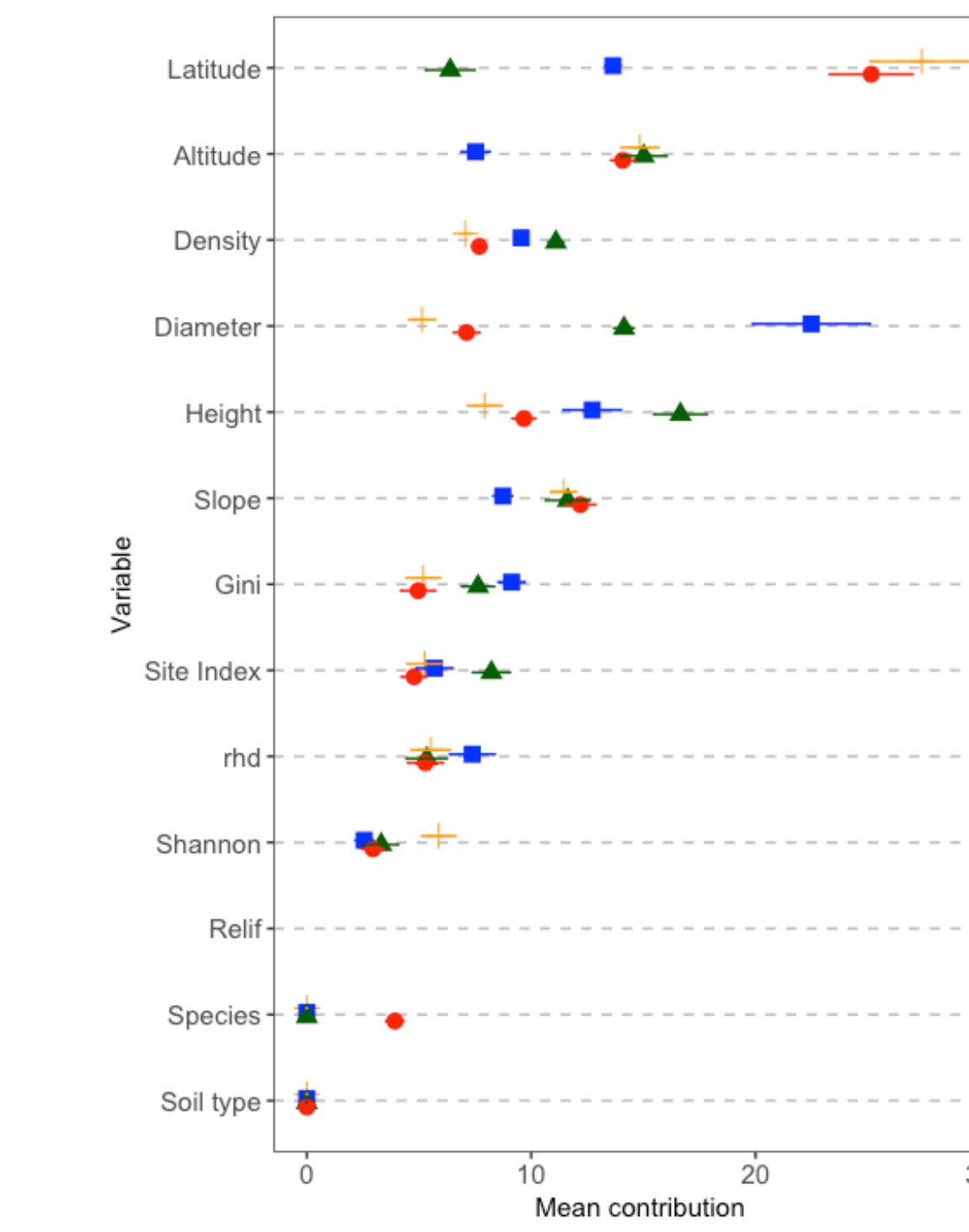
Increasing diameter is related with increasing damage



Increasing basal area is associated with
a reduction in the tree vulnerability to be damaged



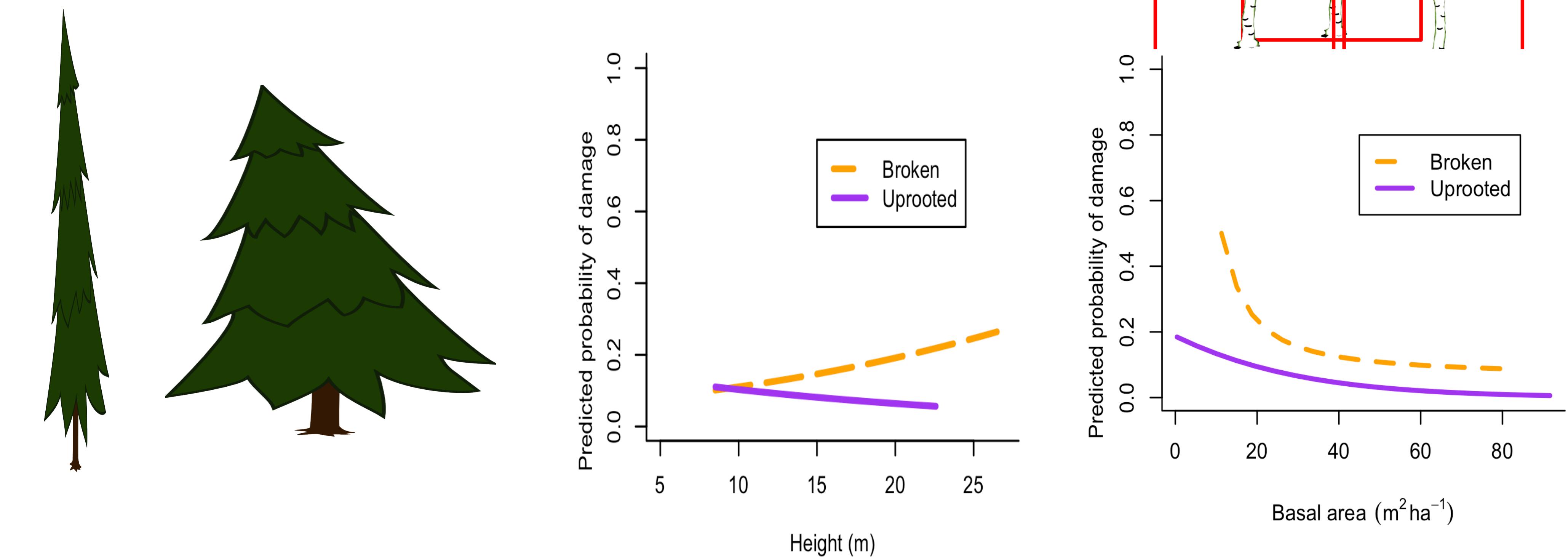
Variables describing composition and site
are helpful to evaluate damage occurrence



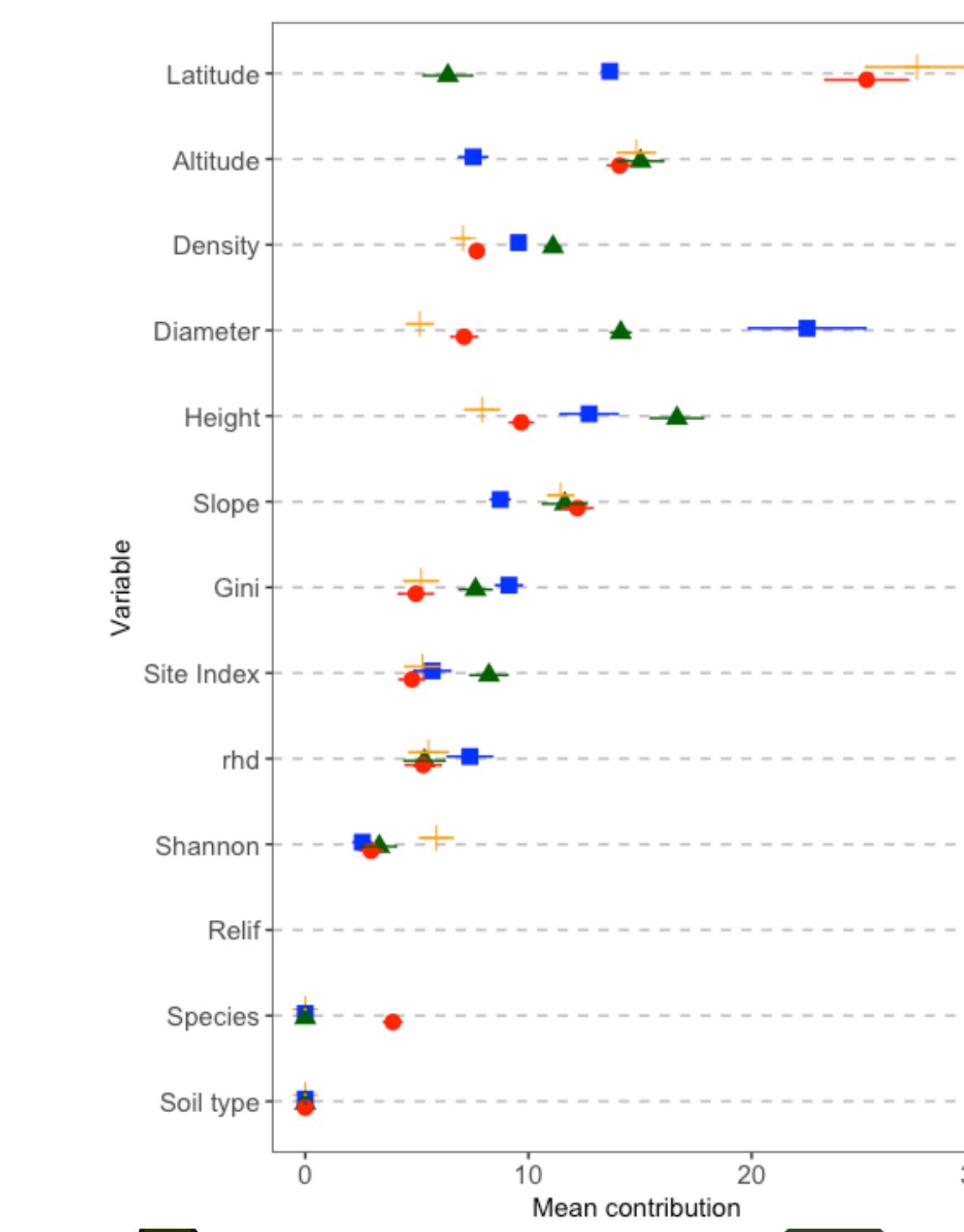
Species dominance plays an important role on
damage type



Variables influencing the probability of
damage are related with the tree form and
stand characteristics



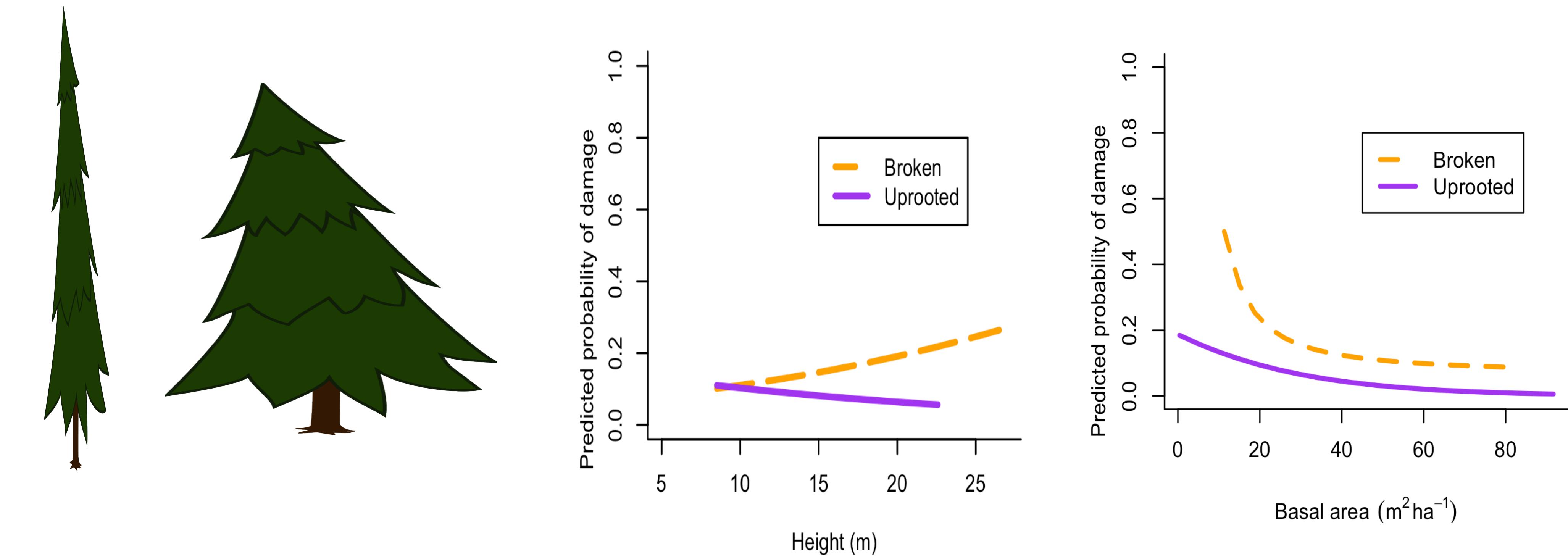
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Olalla Díaz-Yáñez
email: olalladiaz@uef.fi
olalladiaz.net / @olalla