

The background of the slide is a scenic landscape. In the foreground, there are dark silhouettes of evergreen trees. In the middle ground, a calm lake reflects the sky and the surrounding forest. In the background, a large mountain peak is visible, with a bright sun setting behind it, creating a lens flare effect. The sky is a mix of orange, yellow, and blue.

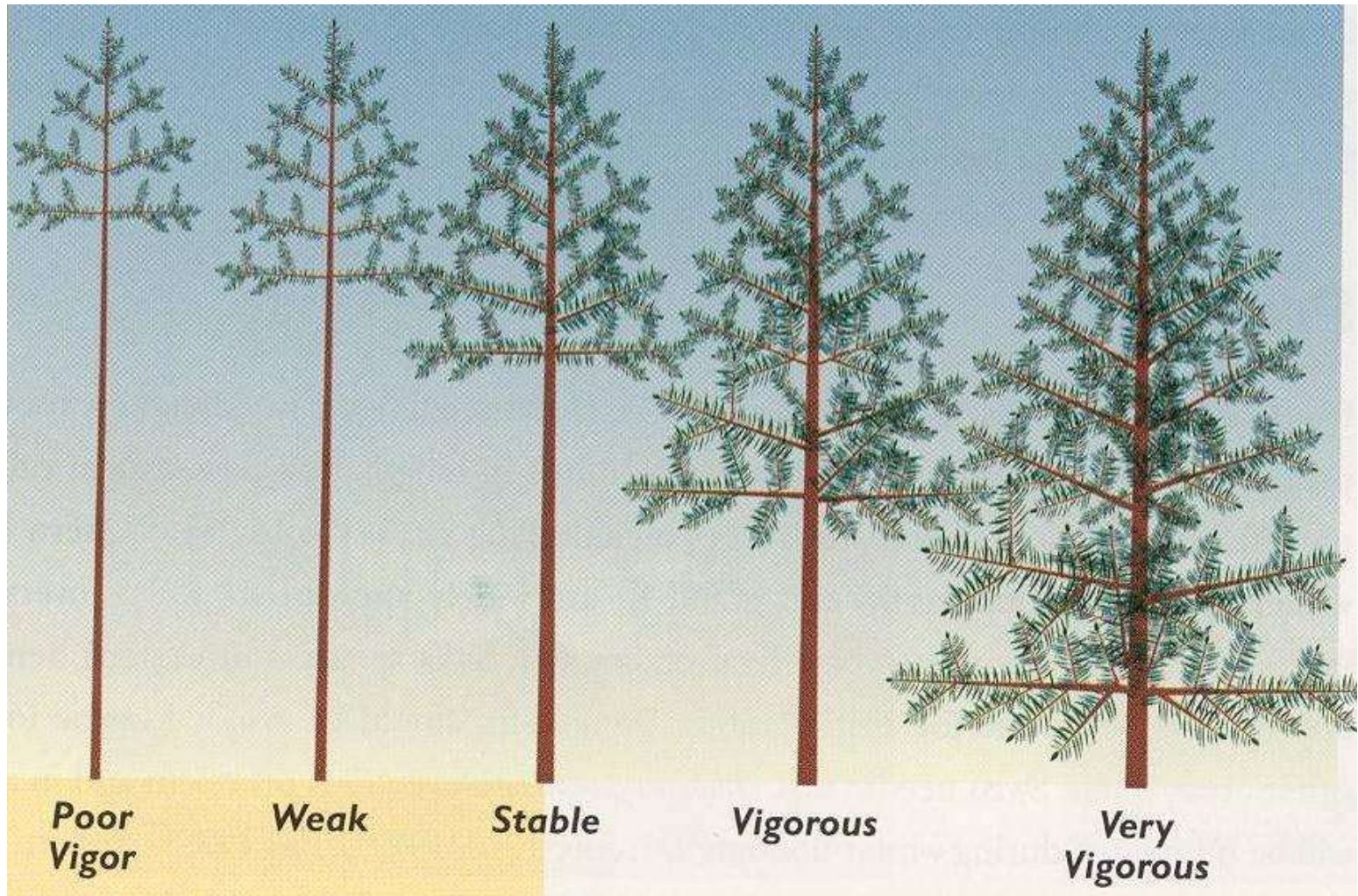
Land Stewards
Maintaining Healthy Trees &
Forests –
**EVALUATING TREES FOR
HEALTH AND VIGOR**

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“Eyeballing” trees to evaluate health: what do you look for?

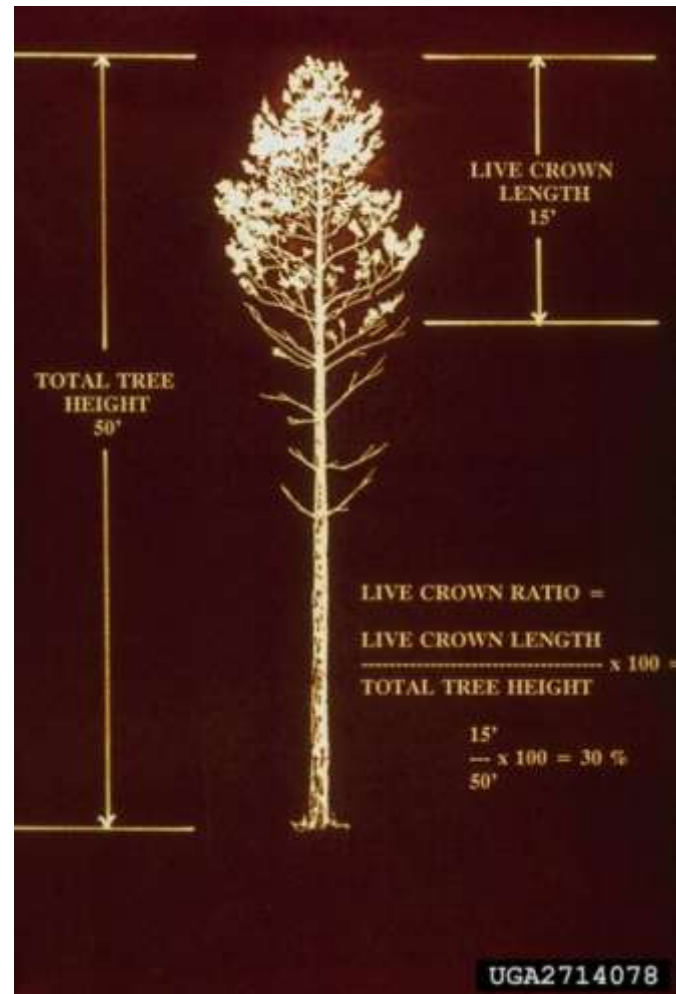
- Overall vigor
- Crown ratio
- Color, density, and amount of foliage
- Height growth & crown shape
- Ratio of height to diameter

Vigor



Crown ratio

- = Crown length/total height x100
- 30% or better preferred



Foliage Color & Density



Healthy crown

Tree under attack
by flatheaded fir
borer.

- Dark green, dense foliage=healthy
- Yellow-green, sparse foliage=unhealthy



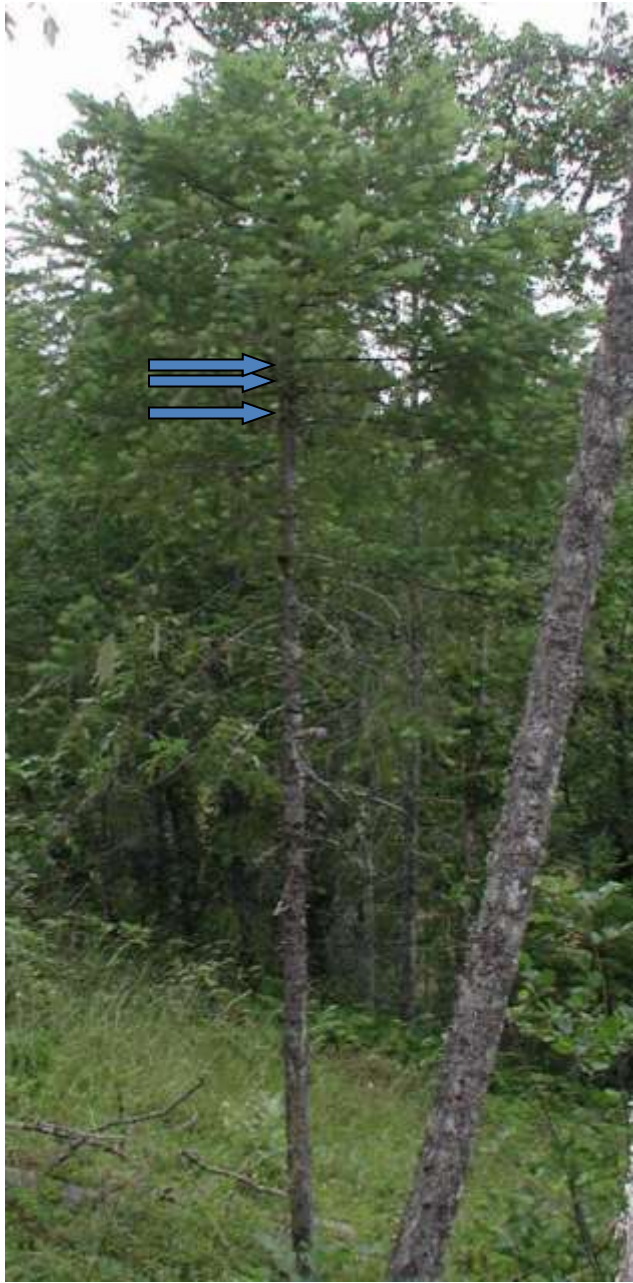
Poor color & density. Tree
died within a year.

Height Growth

Check distance between internodes (pines, true firs, D-fir) – each internode = 1 year of growth

Fast growth

Slow growth



Crown Shape

Trees with pointy crowns are growing faster in ht. & are more vigorous

Trees with round or flat tops are growing slowly; they are often suppressed or old & of low vigor



Height:Diameter ratio

- Skinny trees (large height to diameter ratios), with lopsided crowns, are especially vulnerable to blowdown and snow/ice damage



Eyeballing summary

- All other things equal, good “leave” trees are vigorous trees with good crown ratios (30%+), dark green, dense foliage, rapid height growth, and good form.
- Good “take” trees have poor vigor, crown ratios, etc.