

## Hemlock Branch End Example

Find one hemlock tree in the rectangle that looks the healthiest and use the following codes for HWA assessment:

How healthy are the branch ends?

Healthy (H)= <25% of branch ends have HWA; branch end needles are green and healthy; minor to no HWA on rest of branch

Moderate (M) = 25-50% of branch ends have HWA; HWA throughout rest of branch; needles not fully robust

Unhealthy (U) =>50% of branch ends have HWA; sickly needles; rest of branch heavily infested

N (Not sure)= e.g., Can't see branches, etc.

In the photo to the right, I would code this as "moderate" because the branch is clearly infested with HWA (very high amount on branch besides the ends) but the branch ends themselves look pretty good and the needles aren't quite losing color or falling off





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How healthy are the branch ends?

Healthy (H)= <25% of branch ends have HWA; branch end needles are green and healthy; minor to no HWA on rest of branch

Moderate (M) = 25-50% of branch ends have HWA; HWA throughout rest of branch; needles not fully robust

Unhealthy (U) =>50% of branch ends have HWA; sickly needles; rest of branch heavily infested

N (Not sure)= e.g., Can't see branches, etc.

In the photo to the right, I would code this as "healthy" because the branch shows no sign of HWA and needles are full and green





#### Hemlock Branch End Example

Find one hemlock tree in the rectangle that looks the healthiest and use the following codes for HWA assessment:

How healthy are the branch ends?

Healthy (H)= Only 1-25% of branch ends have HWA; branch end needles are green and healthy; minor HWA on rest of branch

Moderate (M) = 25-50% of branch ends have HWA; HWA throughout rest of branch; needles not fully robust

Unhealthy (U) =>50% of branch ends have HWA; sickly needles; rest of branch heavily infested In the photo below, I would code this as "unhealthy" because the branch is clearly infested with HWA and many of the needles have fallen off.



N (Not sure)= e.g., Can't see branches, etc.

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## Special Hemlock Instructions- Canopy

Find one hemlock tree in the rectangle that looks the healthiest and use the following codes for canopy assessment:

What % of canopy is healthy?

Healthy (H) = >75% healthy; most skylight blocked by deep green foliage; most branches alive with lots of needles

M (Moderate)=40-75% healthy; some skylight visible, foliage beginning to thin; some sickly looking lower branches, lighter green needles

Unhealthy (U)= <40% healthy; lots of skylight coming through due to dying branches, needles are pale and grayish, foliage thin

Not sure (N) = e..g, can't see branches, etc.



# Hemlock Canopy Example- Healthy





#### Hemlock Canopy Example- Moderate Health

Looking up under tree view Percent Looking up under tree view Healthy 60-40%



#### Hemlock Canopy- Unhealthy

