Tamarack (*Larix laricina*)



Dormant bud

The bud is brown and dome shaped when dormant. The tip might turn green before you see the needles. You do not record this phase.



Breaking needle bud

One or more breaking needle buds are visible (green needle tip is visible at the end of the bud). This is before the first needle has unfolded and spread away from the stem.

Needles - One or more live, unfolded needles (spread away at an angle from the developing stem enough that its point of attachment to the stem is visible). In tamarack, clusters of needles emerge from one bud and are 1/2-1" long at maturity. Do not include fully dried or dead needles. Select even when increasing needle size & colored needles.







Colored needles



One or more needles show yellow or brown due to seasonal changes, drought or other stresses. Do not include small spots of color, leaf damage, broken branches or fully dried/dead leaves.

Unripe seed cones - One or more unripe, female seed cones are visible, which are green, dark red, purplish or brown with scales closed together.





Pollen cones - One or more fresh, male pollen cones (strobili) are

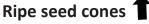
visible. Cones have overlapping scales that are initially tightly closed,

then spread apart to open the cone and release pollen. Do not

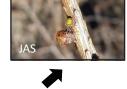








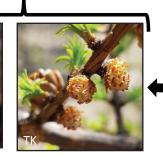
One or more ripe, female seed cones (yellow-brown or brown and the scales have begun to spread apart to expose the seeds inside). Do not include empty cones or cones that remain on plant from previous year.



Dormant buds

Dormant cones overwinter on the plant. You do not record this phase.





include wilted or dried cones that have released pollen.

Open male cones

One or more open, fresh, male pollen cones (strobili) are visible, which have spread apart to release pollen. Do not include wilted or dried cones that have already released pollen.