



# STAGES OF BUD BREAK IN CHESTNUT

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## BUD BREAK IS ASSESSED USING A 0.0 RANKING SYSTEM (ADAPTED FROM WEST AND WEIN 1971).

The number to the left of the decimal denotes the most advanced phenological bud break that is occurring on the tree according to these categories:

- 0-Bud dormant, no sign of breaking
- 1-Bud displays silver/green tip
- 2-Bud green, but tight, no leaves unfolding
- 3-Bud expanding, leaves unfolding from bud
- 4-Internodes visible, leaves hanging but not enlarged
- 5-Internodes visible, leaves enlarged



## BUD BREAK IS ASSESSED USING A 0.0 RANKING SYSTEM (ADAPTED FROM WEST AND WEIN 1971).

The number to the right of the decimal indicates the percentage of buds on the seedling (to the nearest 10%) that have developed to or past this stage.

**Example:** a seedling with terminal at stage 3 with 50% of the buds to this stage would receive ranking of 3.5. The phenological stage of the tree's terminal bud should also be noted separately (or in the case of dieback or deer browse, the uppermost bud).

West, N.E. and R.W. Wein. 1971. A plant phenological index technique. *BioScience* 21(3): 116-117.





**RANK 0.10**

Buds  
dormant, no  
sign of  
breaking





**RANK 1.10**

Buds  
display  
silver/green  
tip





## **RANK 2.10**

Buds  
green but  
tight, no  
leaves  
unfolding





**RANK 3.5 (FIRST BUD)**

Bud  
expanding,  
leaves  
unfolding





**RANK 4** Internodes visible, leaves hanging but not expanded







**RANK 5** Internodes  
visible,  
leaves  
enlarged

