

Biophysical Modelling: Group Exercise - Timber stock account

Timber stock account

	Year 1	Year 2	Year 3	Year 4	Year 5
	m ³ timber				
Opening stock	1,000.0				
Reductions					
Harvest	50.0	40.0	60.0	40.0	50.0
Fire and storm damage	20.0	15.0	25.0	18.0	10.0
Total reductions	70.0	55.0	85.0	58.0	60.0
Additions					
Regrowth	50.0				
Total Additions	50.0				
Closing stock	980.0				

=5% of opening stock

Instructions: Calculate Opening Balances, Closing Balances, Regrowth, and Total Additions for Years 2 to 5.

- Opening Stock for Year 2 is Closing Stock for Year 1
- Regrowth is 5% of Opening Stock

At year 5:

Indicator	m ³ timber	
Average harvest		
(B) Average fire and storm damage		
(A) Expected "Year 6" additions		= 5% of Year 5 closing stock
Recommended "sustainable" harvest		= (A) - (B)

Instructions: Calculate

- Average Harvest for Years 1 to 5
- (B) Average fire and storm damage for Years 1 to 6
- (A) Expected "Year 6" Additions (= 5% of Year 5 Closing Stock)
- Recommended "sustainable" harvest (= (A) - (B))