

Lab-Forest Dilemmas

Background:

In North Carolina, 50 million tree seedlings are planted annually and nature plants millions more. It is a 6 billion dollar industry for our state. Forest management by all landowners (public and private) is changing to reflect an understanding of the forest as an ecosystem that contains many interacting parts, all of which need to be considered to have a healthy forest. One tool of forest managers is fire. Instead of trying to put out every fire, foresters now know that fire is part of the forests' natural cycle, and may use it in managing the forest.

North Carolina's forests have a variety of owners and managers, including the federal governments (Forest Service, Bureau of Land Management), state government (North Carolina Forest Service), private industry, and private non-industrial landowners. Each of these land managers must work with the others to sustain the best possible management of North Carolina's collective forests. Best Management Practices are used to protect water quality and maintain healthy forests to sustain the many benefits desired from our forests, not just now, but for hundreds of years to come.

Procedure:

1. Each student begins with \$95,000 (one \$50K, one \$25K, one \$10K, one \$5K, and five \$1K) and one game token. One die and game board needed per table.
 - A Community Bank should be set up for each table. Funds come and go from the bank. One person on the team should conduct transactions with the bank. Companies may go in debt up to \$750,000, but must pay the bank back immediately as they receive the funds.
2. Each student has just been promoted to the head of a private forest products company, but their backgrounds are very different.
 - Each student will take a "character card" to determine their background/perspective as they approach all of the management decisions that lie ahead.
 - The student will represent the interests of their particular background as they try to guide their company to success.
 - The goal is to have healthy forest lands and money left at the end of the game. SP stands for Sustainability Points. These are used to keep track of the sustainable practices used by each player.
4. Along the way, each student will acquire funds and sustainability points for the decisions made throughout the game. The goal is to maximize profits while staying true to your character's philosophy on forest management. Students should keep a running tally of their money and the "years" that have passed.

Results:

	<u>PLAYER 1</u>		<u>PLAYER 2</u>		<u>PLAYER 3</u>		<u>PLAYER 4</u>		<u>PLAYER 5</u>	
	<u>\$\$</u>	<u>SP</u>	<u>\$\$</u>	<u>SP</u>	<u>\$\$</u>	<u>SP</u>	<u>\$\$</u>	<u>SP</u>	<u>\$\$</u>	<u>SP</u>
Job Title										
Beginning Balance	\$95K	0	\$95K	0	\$95K	0	\$95K	0	\$95K	0
Balance at the end of the game										

Time to tally up your personal success.

- Transfer your total money to ROW 1 and your total sustainability points to ROW 5.
- Each character card was assessed a dollar value and a sustainability value. Add that to the table below.

- Project the value of your company 50 years into the future. Interest gained on your funds adds 2% to your overall wealth. Enter this in ROW 4 of the table below.
- Sustainability points represent your investment in *future* forest harvests and, as such, are also assigned a monetary value. Each Sustainability Point is worth \$200,000. Calculate this value and enter this in ROW 8 of the table below.

	Player 1	Player 2	Player 3	Player 4	Player 5
1	Amount of Money at end				
2	Amount of Money listed on the Character Card				
3	Total Amount of Money				
4	Total Amount of Money WITH 2% Interest added to Row 3				
5	# Sustainability Points at end				
6	# Sustainability Points listed on the Character Card				
7	Total # Sustainability Points				
8	Value of Sustainability Points (each worth \$200,000)				
	TOTAL NET WORTH (add rows 4 and 8)				

Analysis Questions:

1. How many players experienced any debt? How much was the greatest total debt?
2. Did any players experience more than \$750,000 debt (aka declare bankruptcy)?
3. What were the factors most responsible for each bankruptcy?
4. What was the greatest profit made by anyone at your table? What were the factors most responsible for this success?
5. What choices had the greatest impact on your profit margins? EXPLAIN in detail.
6. If you knew the monetary value assigned to sustainability points at the beginning of the activity, how might this change your choices?
7. Describe at least two of the challenges faced by forestry corporations when the desire for profit conflicts with the need for conservation.