

What is the Value of this Tree?

1. Determine the height of your tree.

- Measure the height of your friend, from the ground to the top of their head. Have that friend stand at the base of the tree that you are trying to measure.
- Find a place to stand where you can see the top of your tree.
- Measure the distance from your friend at the base of the tree to where you stand with the meter tape.
- Hold your arm out in front of you, and close one eye. Hold your fingers so that they “pinch” the top of your friend’s head to their toes.
- Imagine your friend is stacked head to toe from the bottom to the top of the tree. Using your fingers, try to measure how many of your friends it would take to reach the top.

(# of friends to top) x (height of friend) = _____ m

2. Measure the circumference of the tree at chest height.

Circumference of tree: _____ m

(1 inch = 0.0254m)

3. Determine the amount of Carbon in the tree (C)

Use the “How Much Carbon Is in a Tree” chart with the height and circumference of your tree.

Total carbon in your tree (C) : _____ kg

What is the Value of this Tree?

1. Determine the height of your tree.

- Measure the height of your friend, from the ground to the top of their head. Have that friend stand at the base of the tree that you are trying to measure.
- Find a place to stand where you can see the top of your tree.
- Measure the distance from your friend at the base of the tree to where you stand with the meter tape.
- Hold your arm out in front of you, and close one eye. Hold your fingers so that they “pinch” the top of your friend’s head to their toes.
- Imagine your friend is stacked head to toe from the bottom to the top of the tree. Using your fingers, try to measure how many of your friends it would take to reach the top.

(# of friends to top) x (height of friend) = _____ m

2. Measure the circumference of the tree at chest height.

Circumference of tree: _____ m

(1 inch = 0.0254m)

3. Determine the amount of Carbon in the tree (C)

Use the “How Much Carbon Is in a Tree” chart with the height and circumference of your tree.

Total carbon in your tree (C) : _____ kg

4. Determine the amount of Carbon Dioxide Sequestered by your tree

Using "total C in your tree" from question 3 and knowing that: 500 kg of C is equal to 1,833 kg of sequestered CO₂, then

$(C * 1833) / 500 = \underline{\hspace{2cm}}$ kg of Sequestered CO₂ in your tree

5. Only 23% of the top of the tree will be used for biofuel

Using "total C in your tree" from question 3

$C * .23 = \underline{\hspace{2cm}}$ kg of potential biofuel

6. Determine the amount of jet fuel (in miles travelled) (M) based on the tree

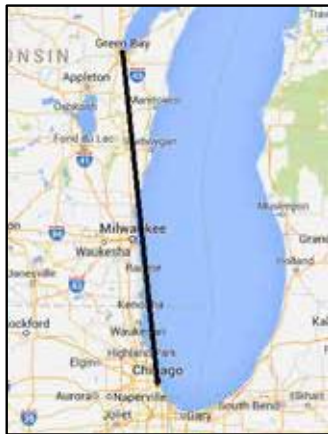
Using kg of potential biofuel from question 5

And knowing that 500 kg of C can fuel a jet to fly 11 miles, then

$(C * 11) / 500 = (M) \underline{\hspace{2cm}}$ miles your tree can fuel

7. How many identical trees are needed for the 175 mile flight between Lambeau Field and Soldier Field?

$175 / M$ (from question 6) = $\underline{\hspace{2cm}}$ trees



Lambeau Field
to Soldier Field
=175 miles

4. Determine the amount of Carbon Dioxide Sequestered by your tree

Using "total C in your tree" from question 3 and knowing that: 500 kg of C is equal to 1,833 kg of sequestered CO₂, then

$(C * 1833) / 500 = \underline{\hspace{2cm}}$ kg of Sequestered CO₂ in your tree

5. Only 23% of the top of the tree will be used for biofuel

Using "total C in your tree" from question 3

$C * .23 = \underline{\hspace{2cm}}$ kg of potential biofuel

6. Determine the amount of jet fuel (in miles travelled) (M) based on the tree

Using kg of potential biofuel from question 5

And knowing that 500 kg of C can fuel a jet to fly 11 miles, then

$(C * 11) / 500 = (M) \underline{\hspace{2cm}}$ miles your tree can fuel

7. How many identical trees are needed for the 175 mile flight between Lambeau Field and Soldier Field?

$175 / M$ (from question 6) = $\underline{\hspace{2cm}}$ trees



Lambeau Field
to Soldier Field
=175 miles