GLOBE Biometry: Trees Height and Circumference Data Sheets

with Simplified Clinometer Technique

Print the Trees Data Sheet:

- Trees Data Sheet (two pages)
  - Print the number of pages needed to record tree height and circumference for up to five dominant (page 1) and five co-dominant (page 2) tree specimens. Each page has space to record information for three trees.

Or select the alternative data sheet option below:

- Trees with field guide (2 pages)
  - This data sheet has the field guide incorporated with space to record measurements for one tree. Print extra copies of the Trees Data Sheet (linked above) for each tree you will measure.

Print the Biometry Site Definition Sheet:

- Biometry Site Definition

GLOBE Biometry: Dominant Tree Data Sheet

Name: ______________________________ Site Name: ______________________________

Date: ______________________________ Time (local): ______________________________

Dominant Tree Species Measurements

Dominant Tree Common Name: ____

Genus/species (if known): ____

Tree # ________

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

Circumference: ______________________ cm

Tree Latitude: __________________________

Tree Longitude:__________________________

Tree Elevation:__________________________

Tree # ________

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

Circumference: ______________________ cm

Tree Latitude: __________________________

Tree Longitude:__________________________

Tree Elevation:__________________________

Tree # ________

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

Circumference: ______________________ cm

Tree Latitude: __________________________

Tree Longitude:__________________________

Tree Elevation:__________________________

Comments:

GLOBE Biometry: Co-Dominant Tree Data Sheet

Name: ______________________________ Site Name: ______________________________

Date: ______________________________ Time (local): ______________________________

Co-Dominant Tree Species Measurements

Co-Dominant Tree Common Name: ______________________________

Genus/species (if known): ______________________________

Tree # ________

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

Circumference: ______________________ cm

Tree Latitude: ______________________

Tree Longitude: ______________________

Tree Elevation: ______________________

Tree # ________

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

Circumference: ______________________ cm

Tree Latitude: ______________________

Tree Longitude: ______________________

Tree Elevation: ______________________

Tree # ________

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

Circumference: ______________________ cm

Tree Latitude: ______________________

Tree Longitude: ______________________

Tree Elevation: ______________________

Comments:

GLOBE Biometry: Tree Data Sheet and Field Guide (page 1)

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Determine the trees you will measure:

1. Determine and record the name of the dominant (most common) and co-dominant (second-most common) tree species using your Vegetative Covers Data Sheet.

Dominant tree species: _____

Co-Dominant tree species: _____

2. For each of these, take measurements of:
   - The tallest tree of that species.
   - The shortest tree of that species.
   - Three more trees that have heights in between.
3. Determine a numbering system for the trees you will measure.

Tree height measurements:

1. Record the tree species and tree number for the tree you are measuring:

Tree species: _____ Tree #: _____

2. Work in a team of two or three. Move away from the base of the tree until the clinometer reads 45 degrees when you see the top of the tree through the straw.
3. Have your partner stretch the 50 m measuring tape from the base of the tree to your toes. Your partner should then step on the tape at the ground and run it up to your eye level.
4. This measurement is equivalent to the height of the tree. Record this as ”Height 1” on the table below.
5. Repeat steps 2-4 twice more and calculate the average height.

Height 1 (m)	
Height 2 (m)	
Height 3 (m)	
Average Height (m)	

6. Repeat steps 2-5 for each dominant or co-dominant tree you will measure.

GLOBE Biometry: Tree Data Sheet and Field Guide (page 2)

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Tree circumference measurements:

1. With a flexible measuring tape, measure from the ground at the base of the tree to the height of 1.35 m up the tree.
2. Measure the circumference of the tree at this height in centimeters.

Circumference (cm)	

3. Repeat steps 1 and 2 for each dominant or co-dominant tree you will measure.

Tree location measurements:

Use a GPS receiver or phone to determine the exact location of your tree. Repeat for all other trees.

Latitude: _____ Longitude: _____

Elevation: _____ m

Record any comments about your site or data collection:

GLOBE Biometry: Site Definition

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Location

Source of location data: ☐ GPS ☐ Phone ☐ Other: _____

If using GPS, complete the table below using a GPS receiver and recording coordinates once a minute for five minutes. Then transfer the values in the "AVERAGE" row to the spaces below.

If using a phone, leave the table blank.

Minute	Latitude	Longitude	Elevation (m)
1			
2			
3			
4			
5			
AVERAGE			

Latitude: _____ Longitude: _____

Elevation: _____ m

MUC

For aid in determining MUC, use page 3 of the Vegetative Covers data sheet and a MUC Guide.

MUC Code: _____ _____ _____ _____

Site Comments (Metadata):

