

2.



Determining scale and calculating area is the first and mandatory step in selecting a carbon site for the project. We obtained the ratio as **1 cm : 1826.8 cm**

3.



Mapping Carbon storage site

Site Details

- Total area:**
= 91.34 m x 91.34 m
= **8,342.99 sq. m**
- Area of each quadrant:**
= 45.67 m x 45.67 m
= **2085.75 sq. m**

4.



Tree verification group: we used *Aerial Map* to identify the trees in each quadrant. We used appropriate numbering to track the trees.

5.

Species Group List
(Reproduced from Jenkins et al. 2002, Figure 1)

Species Group	Scientific Name	Species Group	Scientific Name
Agaveidae	Rubus procerus	Fagaceae	Indocalamus
Agaveidae	Populus nigra	Fagaceae	granatissima
Agaveidae	Black cottonwood	Fagaceae	leucocarpa
Agaveidae	Black willow	Salix	regia
Agaveidae	Common ash	Fagaceae	SP1
Agaveidae	Diamond willow	Salix	reticulata
Agaveidae	Russian cottonwood	Fagaceae	oblongata
Agaveidae	Fraxinus corymbosa	Fagaceae	horreorum
Agaveidae	Marshall cottonwood	Fagaceae	argentea
Agaveidae	Peachleaf willow	Salix	argentea
Agaveidae	Platanus cottonwood	Fagaceae	argentea
Agaveidae	Quaking aspen	Fagaceae	terrestris
Agaveidae	Rust aspen	Fagaceae	alba
Agaveidae	Siberian poplar	Fagaceae	alba
Agaveidae	Spanish alder	Alnus	regia
Agaveidae	Swamp cottonwood	Fagaceae	heterophylla
Agaveidae	White alder	Alnus	incana
Agaveidae	Willow (general)	Salix	SP1
Castanaceae	Alnus verticillata	Chamaecyparidaceae	neohibernica
Castanaceae	Filix, white-cedar	Chamaecyparidaceae	lyrata
Castanaceae	Bald cypress	Lauraceae	distichum
Castanaceae	Eastern red cedar	Juniperaceae	horizontalis
Castanaceae	Garret spruce	Sapindaceae	argentea
Castanaceae	Juniper cedar	Juniperaceae	horizontalis
Castanaceae	Larch (general)	Laraceae	SP1
Castanaceae	Parrot pine	Lauraceae	distichum var. molle
Castanaceae	Pink cottonwood	Chamaecyparidaceae	SP1
Castanaceae	Rhododendron	Ericaceae	americanus
Castanaceae	Softwood (general)	Coniferales	SP1
Castanaceae	Southern red cedar	Juniperaceae	horizontalis
Castanaceae	Substrate shrub	Lauraceae	distichum
Castanaceae	Tanacetum (shrub)	Lauraceae	distichum
Castanaceae	Western larch	Laraceae	horizontalis
Castanaceae	Western red cedar	Juniperaceae	horizontalis
Castanaceae	Willow (shrub)	Salix	SP1
Douglas	Populus tremula	Fagaceae	microcarpa
Douglas	Populus	Fagaceae	microcarpa
Eriocaulaceae	Alnus	Fagaceae	microcarpa
Eriocaulaceae	Alnus	Fagaceae	microcarpa

6.

Tree species group: we used *Tree Identification Guide* and *Species Groups List* to identify the tree species and their scientific names.

Tree circumference group: we measured the circumference of the trees and filled up the *Tree Data Entry Sheets*.

We took measurement of about 75 trees in our site and entered all the data into the GLOBE database.



7.

The biomass of shrubs and herbaceous were taken to obtain the amount of carbon stored in them. We measured 25 shrubs and herbaceous from three different sample sites.



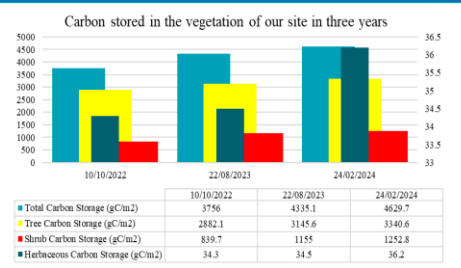
8.

1.



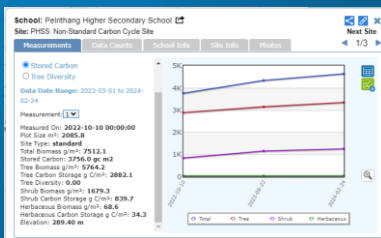
Carbon is the most abundant element in living things. It accounts for 45-50% of the total mass of the biosphere. It is also present in the Earth's atmosphere, soil, oceans, and crust.

12.



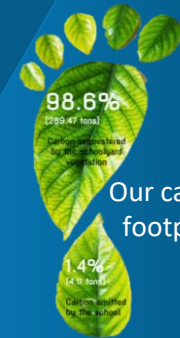
Summary of the carbon stored in the vegetation of our schoolyard.

Data analysis using the GLOBE visualization system.



11.

10.



Our carbon footprint

We calculated Net Primary Productivity to understand the pattern in which biomass and carbon storage change over years.

9.