



## Ecosystems and the Carbon Cycle: Summary Table

		Site 1		Site 2		Site 3		Site 4		Site 5	
		U	C	U	C	U	C	U	C	U	C
<b>Carbon Flux</b>	Time										
	$\delta$ CO <sub>2</sub> (ppm)										
	Net CO <sub>2</sub> Flux (gCO <sub>2</sub> m <sup>-2</sup> h <sup>-1</sup> )										
	Average Air Temp (°C)										
	Average Humidity (%)										
<b>Topography</b>	Grid Reference										
	Elevation (m)										
	Aspect (°)										
	Slope Angle (°)										
<b>Soil</b>	Soil Temp (°C)										
	Soil pH										
	O Horizon Depth (cm)										
	O Horizon Colour										
	O Horizon Moisture										
<b>Climate</b>	Wind Speed (ms <sup>-1</sup> )										
	Cloud Cover (oktas)										
	Illuminance (lx)										
	Exposure (total)										

U = uncovered      C = covered

Name: \_\_\_\_\_

Date: \_\_\_\_\_



## Ecosystems and the Carbon Cycle: Summary Table

		Site 6		Site 7		Site 8		Site 9		Site 10	
		U	C	U	C	U	C	U	C	U	C
<b>Carbon Flux</b>	Time										
	$\delta$ CO <sub>2</sub> (ppm)										
	Net CO <sub>2</sub> Flux (gCO <sub>2</sub> m <sup>-2</sup> h <sup>-1</sup> )										
	Average Air Temp (°C)										
	Average Humidity (%)										
<b>Topography</b>	Grid Reference										
	Elevation (m)										
	Aspect (°)										
	Slope Angle (°)										
<b>Soil</b>	Soil Temp (°C)										
	Soil pH										
	O Horizon Depth (cm)										
	O Horizon Colour										
	O Horizon Moisture										
<b>Climate</b>	Wind Speed (ms <sup>-1</sup> )										
	Cloud Cover (oktas)										
	Illuminance (lx)										
	Exposure (total)										

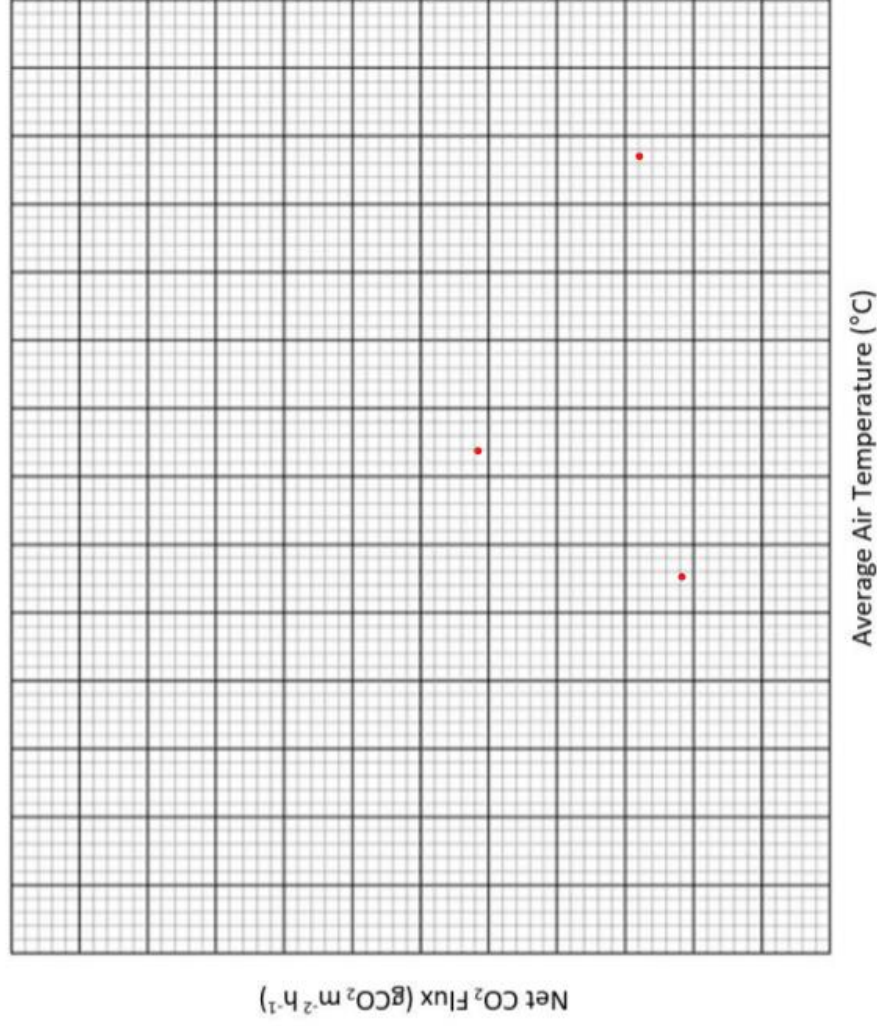
U = uncovered      C = covered

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Ecosystems and the Carbon Cycle: Follow up

## Scattergraph for CO<sub>2</sub> flux versus air temperature



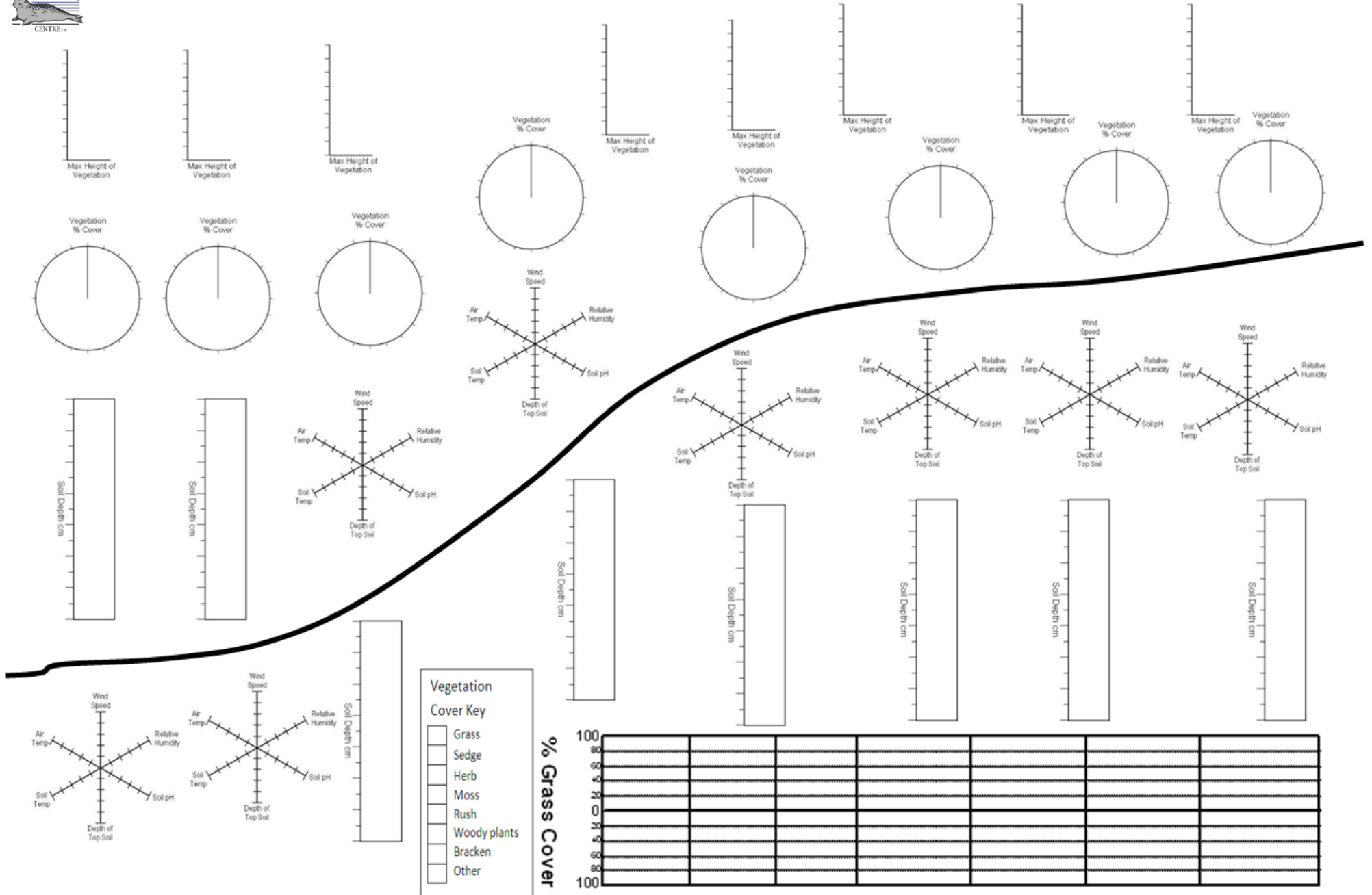
1. Describe any relationship between average air temperature and CO<sub>2</sub> flux for the covered box. Explain what might be happening to relative rates of photosynthesis and respiration to cause this.
2. Describe any relationship between average air temperature and CO<sub>2</sub> flux for the uncovered box. Explain what might be happening to relative rates of photosynthesis and respiration to cause this.
3. Based on these and the long term data set which, if either, hypothesis can we accept?
4. What other factors could be influencing the results?

Name: \_\_\_\_\_

Date: \_\_\_\_\_



# Ecosystems and the Carbon Cycle: Located Data



**Vegetation Cover Key**

- Grass
- Sedge
- Herb
- Moss
- Rush
- Woody plants
- Bracken
- Other

**% Grass Cover**

100							
80							
60							
40							
20							
0							
20							
40							
60							
80							
100							

Name: \_\_\_\_\_

Date: \_\_\_\_\_