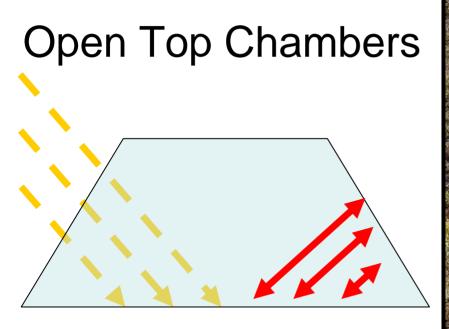
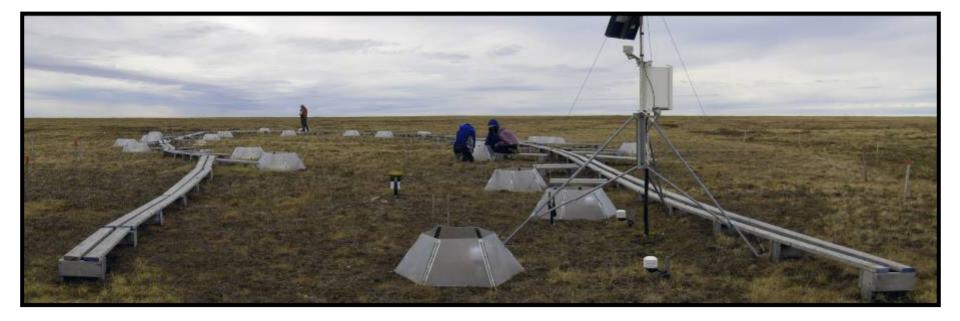
## Our Lab's Main Question

#### How will Arctic plants be effected by Climate Change?



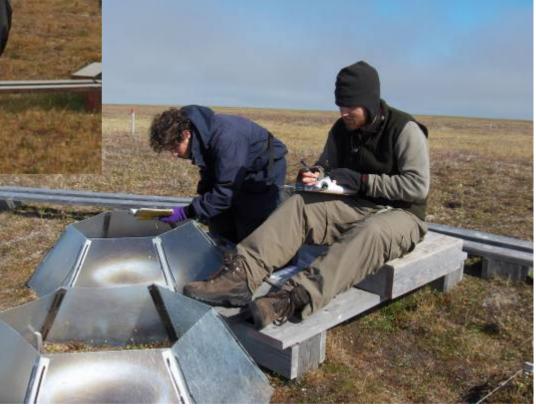








Gather & Analyze Data Present Findings



## Phenology

 Observe progression of life cycle through time



## **Growth Measures**

 Track heights of leaves

 Track heights of flowers



#### **Flower Counts**

#### • Count number of flowers in each plot



**Species:** *Cassiope tetragona* 

#### **Record Count:**

856 flowers in one plot. Set by Jeremy May on Julian Day 196 of 2008

#### **Point Framing**

• Use 100-point grid to catalogue the species "hit" by a ruler on its way to the ground

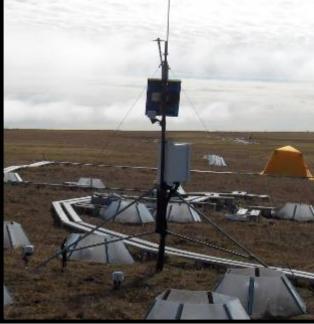


## Measurements

 Thaw Depth (Poke the ground with a stick until you hit hard stuff—that's the permafrost)



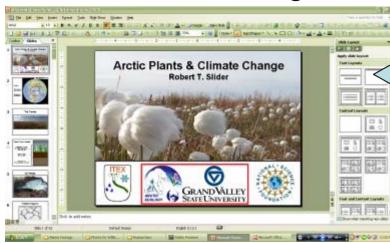
• Air and Soil Temperatures (Store with Data Loggers)



#### Making Science Gather Data in Field



#### **Present Findings!**



#### **Enter in Databases**

C	D		P	C.	H	11		2	8	1	M	N	0	P	0
11 Cardenine proternie	CPREETER	Firmt	D.	1	0	-	0	1	0	0	-				
Cill Cardamine presentia	OPENSITY	Dag	0	- 1	0		0	1	0	0					
Ell'Cardanilles proterais	CROGIFS	Elmini	- 80	- 1	0		0	1.1	0	0					
ETICardamine praisvais	CPR027F0	Total	0	- 1	- 0		0		0	0					
ETH Carvo sourdisature	CSTABTPO		0	- 1	0		0		0	0					
ILTI Cares squattis/Maria	CETARTRO		Ð	- 1	- 0		0	- 1	- 0	0					
Elli Caren sigaetikafatara	CSTARTED	Find	0		.0		0		1						
Elif Careo aquebia/stana	CSTABTPO		- 0		. 0		0		- 0	0	-	1			
El Cares aquatitis/stans	CSTARPO	(frittal)	D.	- 1	- 0		0	1.1		1	1	-			
EIII Ouportia fisheri	DRISETPO		0	- 1	.0		11	- 28	11	0					
El t Duponta faheri	DRGBTPO.		- 0.	- 1	- 0		0	3.	15	. 0					
Et l'Organité Paheri	CHISTPU .		- 10	- 1	- 0		31	1	- 0	15					
CI / Duportia faheri	ORS87P0		- 91		0		0		0	0					
El 1 Daporto faheri	DRISETPO		- 0	- 1	- 0		11	- 23	- 20	30					
ET Stephenerskinte	CINETES		- 12		- 0		2	- 1	- 0	- 0					
E11 Grieghotum triata	CTREFF.	Row.	- 61	- 1	- 0		0	- A.	- 0	. 0					
E C Like tophonam & Mar		Pid.	- 01	- 1			0	3	- 5	. 6					
ET Cricphoney triate	CIPETER		- 81	- 1	- 0		0	1	- 0	0					
El t Grieghotum triets	CTROTPO		- 0	- 1	- 0		2	- 3.	- 5	. 5					
III CT Brieghonen nassenikum	HUSHING		- D.	1	0		10	1	0	0					
EFF Bridghorum russeolum	1010/381710		- Ð	- 1	0		0	- 0	- 0	0					
El tierlophorum russeolum	GRUSETPO		- 00	- 1	0		0	1.1	0	. 0					
The logic of the second s	09038790		- 10	- 1	0		10	1.1	0	0					
CIT Griegherum russwolum	107030770		0	- 1	0		0		- 0	0					
Elitheractive paceforts	HPAULTPO		- D.				0	1	0	. 0					
Elliffiernohine peneifforn	HPAORTRO		0	- 1	- 0		1	1	0	0					
CONVersion pracifiors	HEAUBTED		- 0	1	0		0		- 2	2					
Stitterachter pausfors	HPAUETPO		10	- 8	. 0		0	1.8	. 0	. 0					
anti-fitternebine panetforn	HPAUETRO	Total	0	1	0		1	- 2		1					
CENERAL SAME		1100							10	1000		-	-	-	12
	100														Seat.

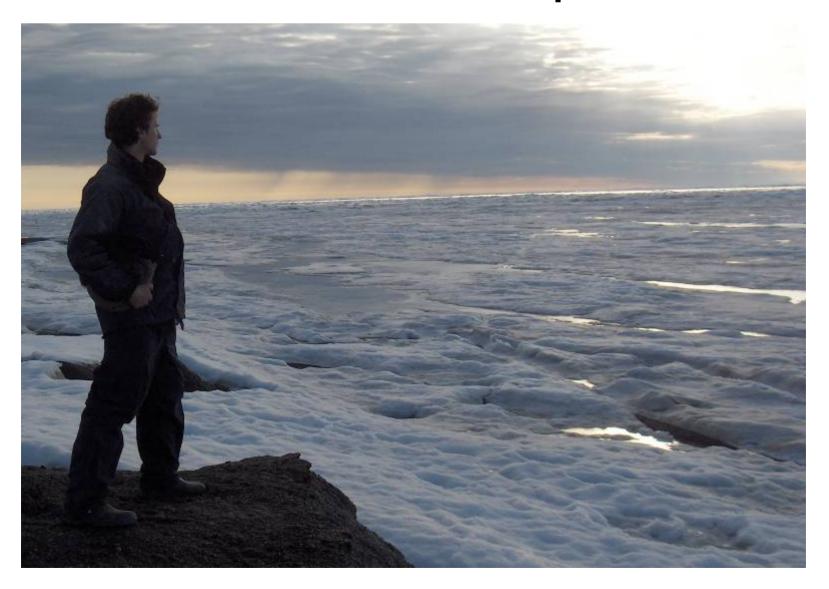
#### **Check for Errors**

## **Questions?**

#### Why be a Researcher?



#### Nice Landscapes

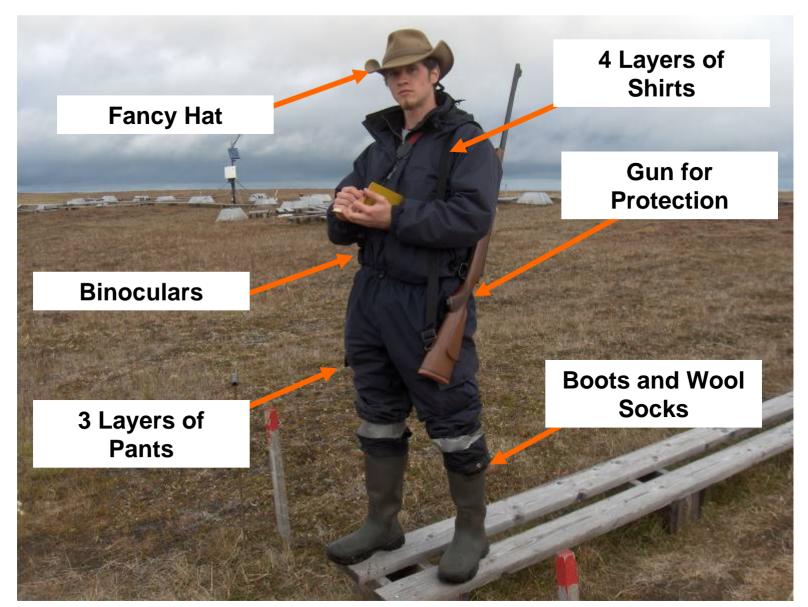




#### Lots of Time Outside



## Spiffy Outfits



And of Course...

#### Lots of Cool Plants and Animals







## Willow Bush

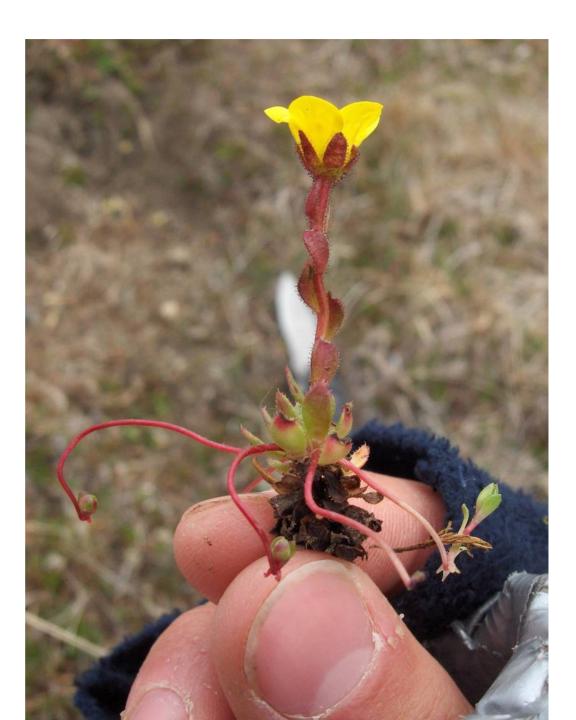
(Salix rotundifolia)



#### Ermine



#### Spiderplant (Saxifraga flagellaris)



## Gray Whale



#### **Bowhead Whale**



# Wooly Lousewort (Pedicularis kanei)



#### Wooly Lousewort (Pedicularis kanei)



#### **Ground Squirrel**



## Snowy Owl



#### Saxifrage (Saxifraga cernua)



#### **Brown Lemming**



#### Ptarmigan



## Water Sedge

(Carex stans)



#### Caribou



# **???** (Luzula arctica)



#### Polar Bear

