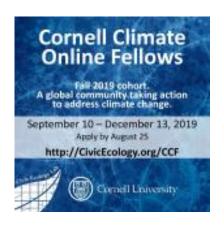
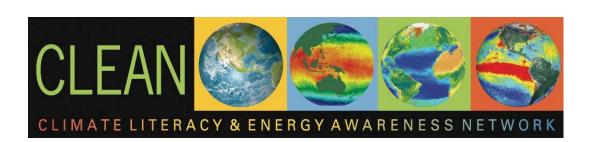
## Cornell Climate Online Fellows (CCOF)



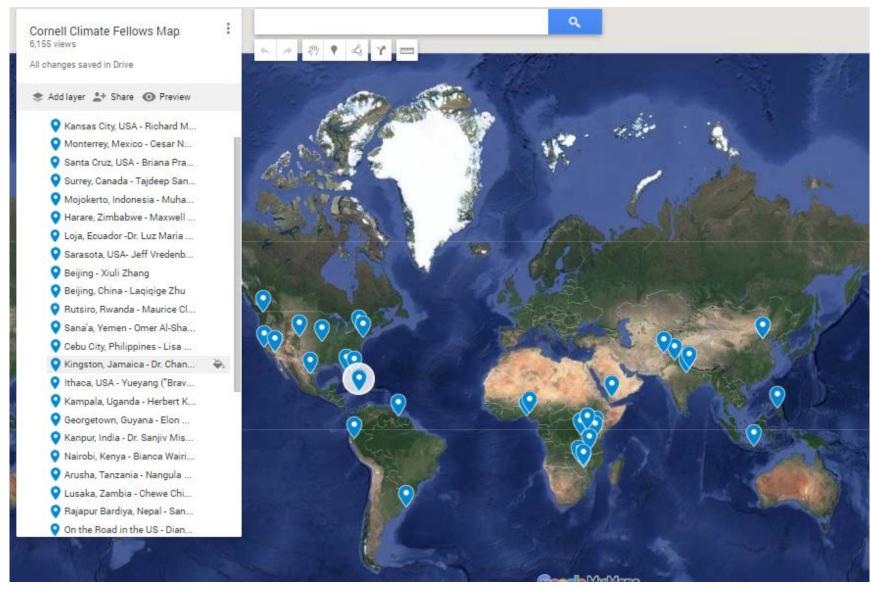




Marianne Krasny
Civic Ecology Lab, Cornell University
6 January, 2020
www.civicecology.org mek2@cornell.edu



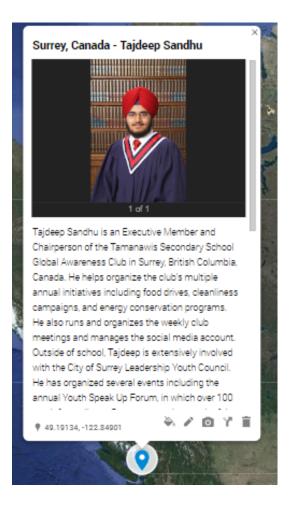
## CCOF Spring 2019 630 applicants 33 fellows, 24 countries



## CCOF Spring 19 http://bit.ly/CCOFMap

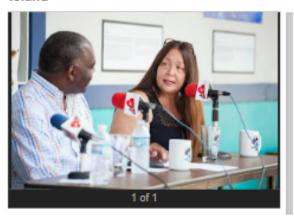






## CCOF Spring 19 <a href="http://bit.ly/CCOFMap">http://bit.ly/CCOFMap</a>

#### Gail Woon - Freeport, Grand Bahama Island

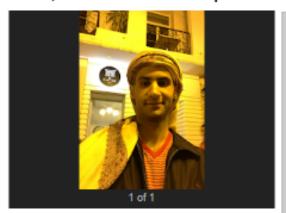


Gail Woon is a marine biologist who hails from Freeport in The Bahamas. Since founding an Environmental Education NGO, EARTHCARE in 1988, Gail has motivated hundreds of volunteers who work with teachers, students, and the wider public to bring awareness to local and global environmental issues—including climate change. EARTHCARE EcoKids enables students to meet with volunteers on the weekends and learn about





#### Sana'a, Yemen - Omer Al-Shareqi



Omer Al-Shareqi is a Masters student in political science at Sana'a University in Yemen and working as a researcher and country expert for the Varieties of Democracy Institute. Omer earned a bachelors degree in political science from Sana'a University. He has also earned academic credits in "Islam, Diversity and Peacebuilding" from the Citizenship and Diversity Management Institute of Adyan Foundation in Lebanon, and

15.36911, 44.191

#### Lagos, Nigeria - Michael Ahove



Michael Adetunji Nunayon Ahove holds a PhD in Environmental Education with a concentration in climate change. He teaches graduate courses and conducts research on the environment and climate change at the Center for Environmental Studies and Sustainable Development, Lagos State University, Nigeria. He often gives invited presentations for government and environmental NGOs on the environment and climate change.

6.52437, 3.3792









# CCOF Fall 2019 588 applicants 39 fellows, 32 countries (13 Cornell students in separate course)



## Today's webinar

- Why Cornell Climate Online Fellows (CCOF)?
- CCOF goal and topics covered
- Technology and format (?)
- Suggestions/ Questions



CCOF Spring 2019

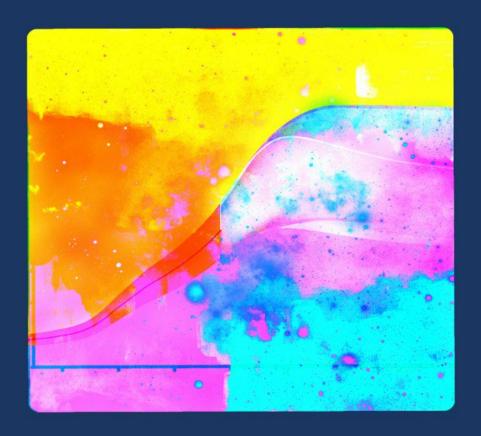
## 1. Why Cornell Climate Online Fellows (CCOF)?





## **Global Warming of 1.5°C**

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.













## **Global Warming of 1.5°C**

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.











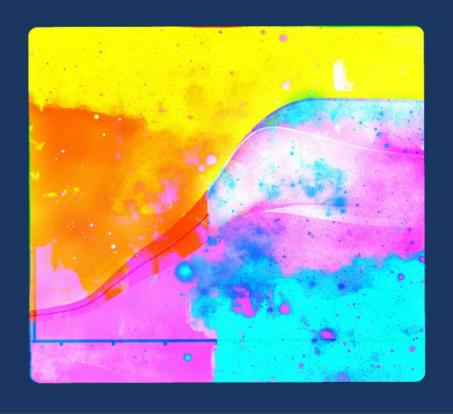
## Political action



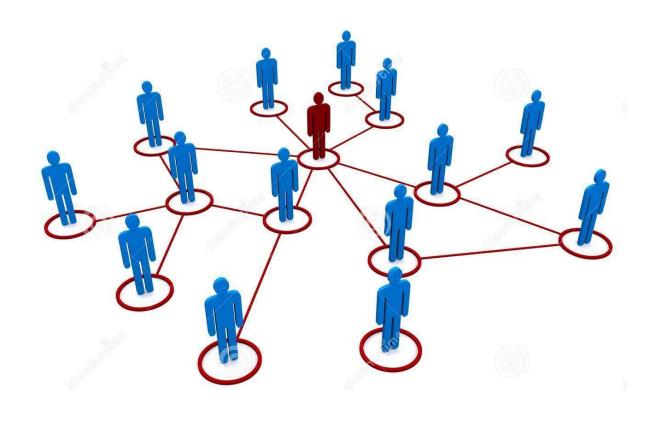


## **Global Warming of 1.5°C**

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.



## We all have networks



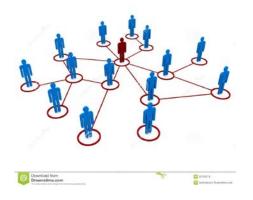






## Scale up action through networks



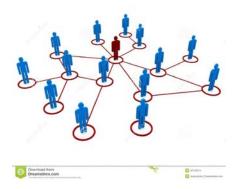


In-person networks

**Evenesis** 

## Scale up action through networks

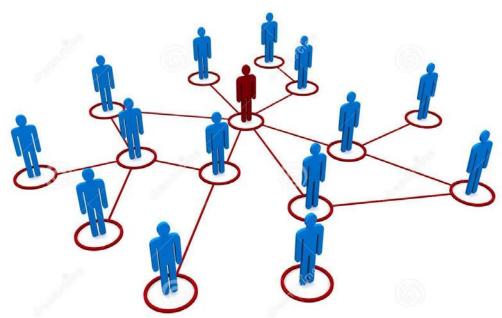




## Online networks

## Why CCOF?

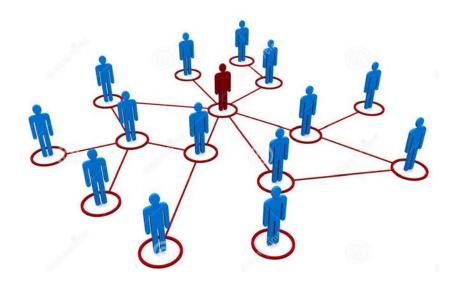
Because we can all scale up our individual behaviors through our networks



# 2. CCOF Goal andTopics Covered

CCOF Spring 2019 630 applicants 33 fellows, 24 countries





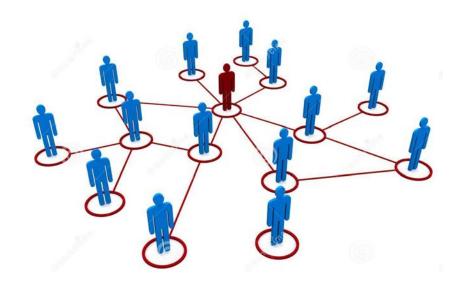




## **CCOF Goal**

To support a global cohort of professionals and university students as they choose and conduct a Drawdown climate action, and engage their network in taking that action.









## **CCOF** schedule

(Need background on Climate Change Science/Communication? Email mek2@cornell.edu)

Week	Topic/Action
1. 9/10-9/16	Introductions, Climate Mitigation and Adaptation
2. 9/17-9/23	Drawdown actions
3. 9/24-9/30	Social networks and spread of behaviors
4. 10/1-10/7	Social mobilization
5. 10/8-10/14	Social norms
6. 10/15-10/21	Social marketing
7. 10/22-10/28	Social media and behavior change
8. 10/29-11/4	Action plan implementation
9. 11/5-11/11	Action plan implementation
10. 11/12-11/18	Action plan implementation
11. 11/19-11/25	Action plan implementation and assessment
12. 11/26-12/2	Action plan implementation and assessment
12. 12/3-12/9	Prepare final presentations on your action implementation
13. 12/10-12/13	Give final presentations on your action implementation

## Two Approaches to Influencing Behaviors

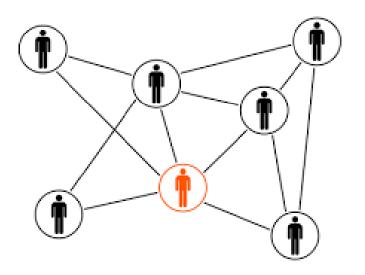
**Social Influence** 

How do we influence others?



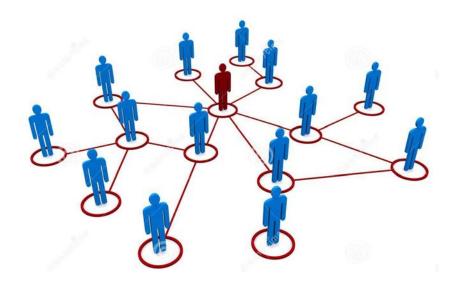
### **Social Network**

Who influences Whom?



CCOF Spring 2019 630 applicants 33 fellows, 24 countries









## **CCOF Components**

1. Content and discussion

2. Weekly realtime discussions 3. Sharing resources

4. Support and encouragement



1. Content and discussion

2. Weekly realtime discussions 3. Sharing resources

4. Support and encouragement

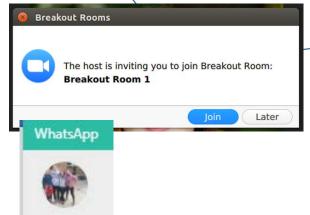


1. Content and discussion

3. Sharing resources

2. Weekly realtime discussions

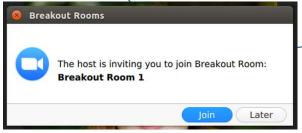
4. Support and encouragement





1. Content and discussion

2. Weekly realtime discussions





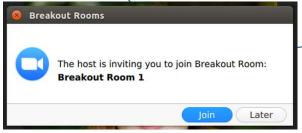
3. Sharing resources

4. Support and encouragement



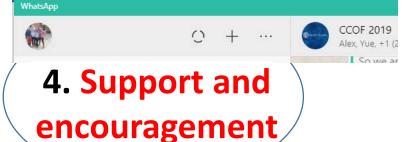
1. Content and discussion

2. Weekly realtime discussions





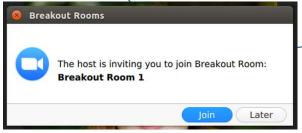
3. Sharing resources





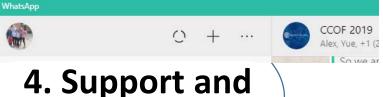
1. Content and discussion

2. Weekly realtime discussions





3. Sharing resources



4. Support and encouragement



## Weekly tasks

10 September – 13 December.

## Tasks completed according to your own time frame with weekly deadline of Tuesday 8am NY time

- 1. Read articles and websites, and view short video lectures about climate change, social influence, and social mobilization.
- 2. <u>Post thoughtful responses to</u> weekly discussion questions based on readings on the fellows discussion board.
- 3. Participate in your small group of fellows.

#### Weekly webinar scheduled at specific time

4. Participate actively in small group and full fellow discussions during our weekly webinars, **scheduled Tuesdays**, **8am-10am**, **New York time**.

#### Tasks completed one time during the fellowship:

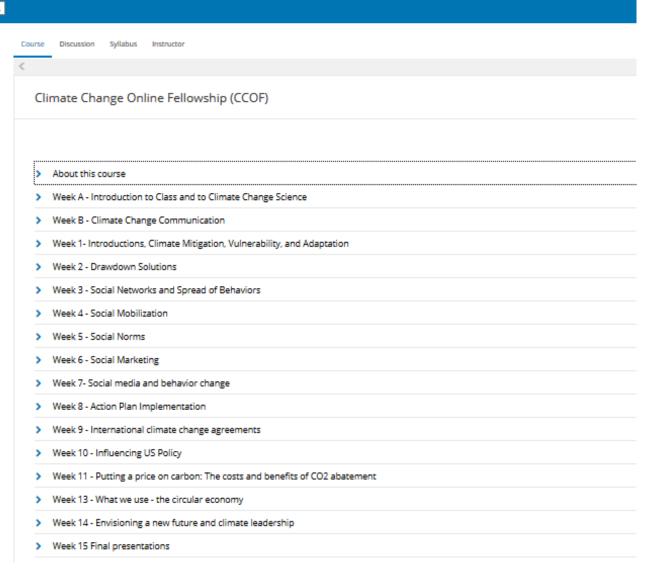
- 5. Plan, implement, and assess a greenhouse gas mitigation action among your social network. Write a report or produce a multimedia presentation of your action, challenges faced, and outcomes realized.
- 6. <u>Answer surveys</u> designed to assess the impact of the Cornell Climate Online Fellows program.

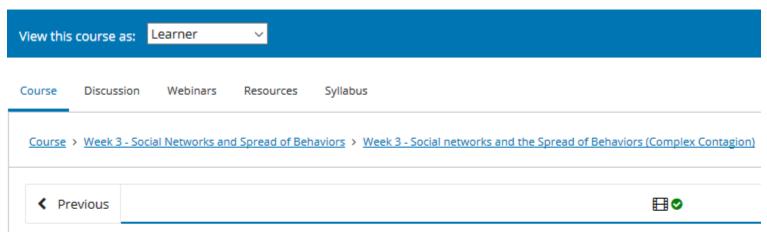
## **CCOF Platform: edX Edge**





iew this course as: Staff





## Week 3 Social Networks and the Spread of Behaviors (Col Bookmark this page



#### READ

- a. Centola, D. (2019). "The truth about behavioral change." MIT Sloan Management Review 60(2): 1.
- b. Popp, T. 2019. "The virality paradox." The Pennsylvania Gazette. Mar/Apr: 42-49. http://thepenngazette.com/the-virality-paradox/
- c. Networks Dynamics Group. https://ndg.asc.upenn.edu/ (Explore this website for additional information on complex contagion and behavior change)

#### DISCUSS

Instructions: Please answer all three discussion questions below. Click on "Add a Post" under each question. USE YOUR NAME IN THE TITLE FOR YOUR POSTS, so it's easy to see who is posting. Once you have posted your own answer to the question, you will need to "respond" to at least two other students' or fellows' posts. If you are one of the early posters, you may need to come back later to find other students'/fellows' posts.

- 1. **Diffusion of behaviors.** In Centola's article "The truth about behavior change," he offers four explanations for why behaviors diffuse through small networks with strong ties rather than large networks with weak ties. Please reflect on each of these mechanisms as applied to what you have observed about climate change or other environmental behaviors.
- 2. **Complex contagions application.** How might you apply Centola's work on complex contagions to your climate network action? How large is your network? How tightly connected are its members?
- 3. **Action Plan.** Please repost your action plan (you can copy and paste from last week) with any changes made as a result of readings, the webinar, and discussions in your small group. Explain BRIEFLY the changes you are making at the top of your answer.

#### Discussion 1. Diffusion of behaviors

Topic: Week 3 Q1 / Week 3 Q1

#### Hide Discussion

#### Add a Post

Show all posts by rec	cent activity 🗸
<ul> <li>O'Gorman - diffusing behaviors in corporate conservation</li> <li>Ill answer the question focused on my experience in increasing participation in corporate conservation. In the world of corporate conservation, strategic complementary</li> </ul>	<u>2</u>
<u>Diffusion of behaviors</u> I will use the example of household waste segregation and solar power in my previous building community to explain the four psychological mechanisms identified by the segregation and solar power in my previous building community to explain the four psychological mechanisms identified by the segregation and solar power in my previous building community to explain the four psychological mechanisms identified by the segregation and solar power in my previous building community to explain the four psychological mechanisms identified by the segregation and solar power in my previous building community to explain the four psychological mechanisms.	<u>1</u>
Diffusion of Behaviours - Jane H I have used the growth of the Green-Schools programme in Ireland as an example of how the 4 elements of Centola's diffusion of behaviours works within a network. 1.	2 new_
<ul> <li>WILLIAM GAGNON         Although at first counterintuitive, it really was a realization for me that yes, indeed, ideas spread more successfully in small groups with strong ties than in large groups     </li> </ul>	<u>w</u>
Tshering Tobgay Diffusion of behaviors. In Centola's article "The truth about behavior change," he offers four explanations for why behaviors diffuse through small networks with strong	<u>ti</u>
Hamidullah_Nikzad We observe todays the activities of networks in social media not physically in field of environment and climate change in Afghanistan. The wide networks in social media	as 1
<ul> <li>Diffusion of Behaviours</li> <li>So much insight on behaviour change in Centola's writing. Indeed behaviour is learnt over time, from repeated exposure, withing close network and from people you tree.</li> </ul>	<u>u</u>
Diffusion of behaviors - Mutasim Adam I think small networks with strong ties are effective rather than large networks with weak ties as I agree with the four psychological mechanisms, when we think of a characteristic content of the co	1 1 an
Dayo Damon mentioned four factors that usually influence behavioral change. **Strategic complementarity** (This applies more to adopting a product or buying a stock that	<u>1</u>
Di Wu  The four mechanisms Centola offered are Strategic complementarity, Credibility, Legitimacy, Emotional contagion. I would like to choose people buying electric vehicles	2
Daniel Hamilton - Diffusion of Behaviors The four mechanisms identified by Centola to explain the success of behaviors diffusing through small networks with strong ties rather than large networks with weak to the success of behaviors.	ie
<u>●</u> <u>Diffusion of behavior Pradeep</u>	1

## **Weekly webinars**

- 1. Overview of concept (Krasny)
- 2. 2-3 fellow short presentations
- 3. Break out into small groups (critical thinking questions)

#### Test ... USE THE CHAT ON ZOOM

Who...

Plays a sport or does an art (which one?!)

Lives in city over 15 million

Lives in country less than one million

Will see snow sometime during this fellowship?

Can bask in the tropical sun this weekend?

Lives in a country where tree planting is considered a major climate mitigation/adaptation action

What time is it now where you are?

Is plastics a climate issue?

Click on Chat to ask any question—give your name and repeat question. (e.g., Meipeng Lu and live in city over 15 million, James Nyere and time is 5am)

## **Small Group Discussion**

- 1. Introduce yourselves.
- 2. Briefly review the local climate impacts and actions you posted on the Discussion Board.
- 3. How *effective* do you think these actions are?
- 4. How might they be *more effective* in reaching mitigation or adaptation goals?

#### **CCOF Fa 19 Small Groups**

#### Group 1

Catherine Rider, USA Crispin Chowle, Zambia Jane Hackett, Ireland Tshering Tobgay, Bhutan Yan Zhu, China

#### Group 2

Dayo Oladipo, China (Nigerian) Emmanuel Niyoyabikoze, Burundi Loan Pham, Vietnam Maximilian Schubert, Germany Thany Thol, Cambodia

#### Group 3

Avinash Acharya, India Francisco Gerardo Garcia Martinez, Mexico Margaret O'Gorman, USA Maya Ashirova, Turkmenistan Rade Glomazic, Austria (Serbian)

#### Group 4

John Leo Algo, Philippines Manomita Das, India Sharin Shajahan Naomi, Bangladesh Sivendra Michael, Fiji

#### **Group 5**

Katarzyna Smętek, Poland Keaton Harris, South Africa Munira Berhe, USA William Gagnon, Canada

#### **Group 6**

Di Wu, China Fernando Lozada, Peru Pradeep Bhattarai, Nepal Shadman Rahman, USA (Bangladeshi)

#### **Group 7**

Charles Sharp, USA Hamidullah Nikzad, Afghanistan Juma Haule, Republic of Tanzania Mutasim Adam, Sudan

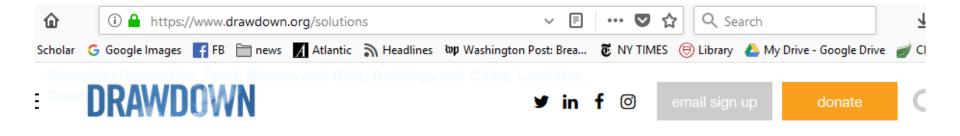
#### **Group 8**

Andrea Tatiana Vargas Elío, Bolivia Maggie Ngwira, Malawi Martin Ramirez, Colombia Tatek Belay Tegegne, Ethiopia

#### **Group 9**

Fatima Delgado, Spain (Ecuadoran) Henry David Bayoh, Sierra Leone Jiyun Jeoung, Japan (South Korean) Lovans Owusu-Takyi, Ghana

### Implementing your action: Choose an action



## Solutions by Rank

Rank	Solution	Sector	TOTAL ATMOSPHERIC CO2-EQ REDUCTION (GT)	NET COST (BILLIONS US \$)	SAVINGS (BILLIONS US \$)
1	Refrigerant Management	Materials	89.74	N/A	\$-902.77
2	Wind Turbines (Onshore)	Electricity Generation	84.60	\$1,225.37	\$7,425.00
3	Reduced Food Waste	Food	70.53	N/A	N/A
4	Plant-Rich Diet	Food	66.11	N/A	N/A
5	Tropical Forests	Land Use	61.23	N/A	N/A
6	Educating Girls	Women and Girls	51.48	N/A	N/A
7	Family Planning	Women and Girls	51.48	N/A	N/A
8	Solar Farms	Electricity Generation	36.90	\$-80.60	\$5,023.84
9	Silvopasture	Food	31.19	\$41.59	\$699.37
10	Rooftop Solar	Electricity Generation	24.60	\$453.14	\$3,457.63
<					>

## Implementing your action: Choose an action





Verturinus by the painter Guiseppe Arcimboldo, created 1590-91, symbolizing the Roman god of metamorphoses.



88.11 GIGATONS REDUCED CO2

## Implementing your action: Choose a network







## Assessing your action: Count actions, survey participants





2.693.058 Views

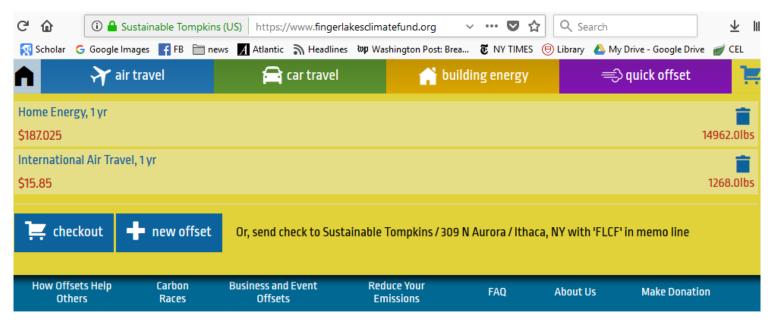
### Eating Bird Food March 22, 2018 - 3

Like Page

Healthy and simple (but incredible!) 4-Ingredient Samoas that might just taste better than the real deal. Shh.... don't tell the Girl Scouts. Vegan, gluten-free and paleofriendly.

Grab the full recipe here: https://www.eatingbirdfood.com/4-ingredient-samoas/

## Assessing your action: Estimate CO2 saved or offset



How it Works Recent Offset Donors Recent Grant Awardees

### My Action: Carbon Offsets for air travel



## My Action Network: Office colleagues in Fernow Hall

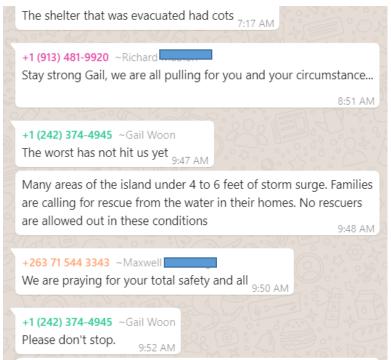


## My Action Network: Office colleagues

						Photo by Bill Hecht		
How Offsets Help Others	Carbon Races	Business and Event Offsets	Reduce Your Emissions	FAQ	About Us	Make Donation		
Team Fernow	and Friend	S	Carbon R	aces Leade	rboard			
					Friends of E	Friends of Ellen		
C 10 4101			1		CO2 Offset:	523,558 lbs		
Score: 184191 Offsets: 81					Number Of	fsets: 64		
JIISELS: 81					Number Pla	ayers: 19		
Team Members	Invite others t	to join this team			Mothers Out	t Front - Corning		
mark whitmore			7		Community	Team		
Christina Stark					CO2 Offset:	306,487 lbs		
Angela Fuller					Number Of	fsets: 76		
Barbara Knuth					Number Pla	ayers: 17		
Brian Hutchison								
Brian Chabot					Sustainable	Tompkins		
David Weinstein			3		CO2 Offset:	253,862 lbs		
Wade S			,		Number Of	fsets: 82		
Anne Armstrong					Number Pla	yers: 20		
Rachael Mady								
Yue Li					Fernow and	Friends		
Mi Yan			Λ		CO2 Offset:	184,191 lbs		
Aleysia					Number Of	fsets: 81		
Bjorn Whitmore					Number Pla	ayers: 31		
Sylvan								
Patrick Sullivan					Tompkins Co	ounty Climate Protection		
Lars			5		Initiative			
Shorna Allred					CO2 Offset:	143 046 lbs		

## Ongoing support among fellows





OF STREET LIEW CHAL

2019

yesterday

·2) 374-4945: Oh my goodness. Tha...

68 64 47 04

yesterday

Great people are designed to overcome great challenges that why you are Great Gail.

So the great victories makes you Great Gail.

You are a special star in this CCOF Community.

Bless you my dear sister. You are an inspiration.

3:02 PM

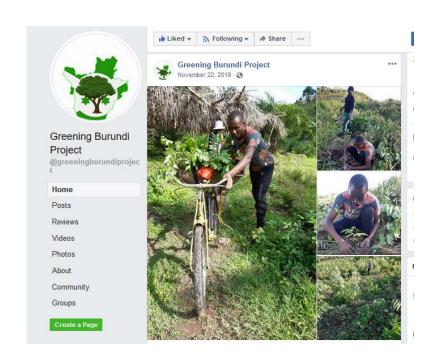
## **Lessons Learned**

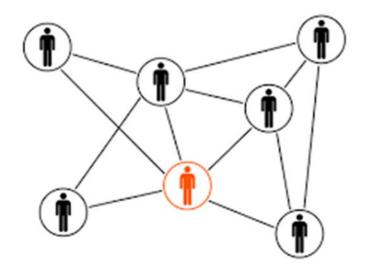
An online community can support people as they deal with climate crises

People are taking action to mitigate climate change in circumstances we wouldn't expect

Influencing one's network is hard, but seems to be more successful in homogenous groups with established trust

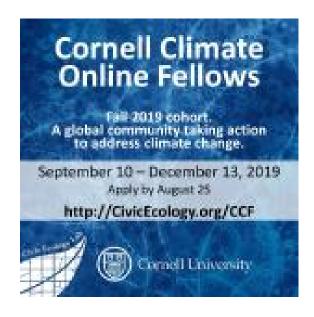
Need multiple messengers and multiple messages to change behaviors (forget the "influencer"!)





## 4. Suggestions? Questions?





## Thank you!

