Engaged Programs - Getting Kids Excited About Spatial Science through 4H Drone Discovery!

Charles W Malone, Senior Extension Resource Educator
Cornell University Cooperative Extension
cwm4@cornell.edu
Engage!

Prop-copter

- What is it?
- How does it work?
- What happens when it spins:
  - Fast
  - Slow
  - Clockwise
  - Counter clockwise
- Try controlling the
  - Distance
  - Direction
Getting Kids Excited About Science!
4-H

I pledge my HEAD to clearer thinking,
My HEART to greater loyalty,
My HANDS to larger service,
And my HEALTH to better living,
For my club, my community, my country and my world.

- US Dept. of Agriculture
- Youth Development Program

With a certain level of intentionality, we empower and strengthen communities vicariously by engaging kids in inquiry based science.

http://archives.msu.edu/collections/4H_photos.php
http://4-hhistorypreservation.com/History/Hist_Nat/
4-H Mission Mandates

- Science, Technology, Engineering and Math (STEM)
- Healthy Living
- Civic Engagement
4-H in New York

- 170,000 youth
- 50 project areas
- Clubs, camps, afterschool programs
- NY 4-H administration located in the Bronfenbrenner Center for Translational Research
4-H Geospatial Sciences

- 4-H Educator capacity-building
  - Staff
  - Volunteers
  - Youth Leaders
- GPS
- GIS
- Remote sensing
- Community mapping projects
State Fair Pipeline

- Training and Workshops
- Field experience
- Community mapping
- Leadership
- Recognition

- CCE Ontario - GeoSeekers
- CCE Broome - Tech Wizards
Drone Discovery

https://vimeo.com/22392382
2016 Results

**MEDIA IMPRESSIONS**
98,667,098

**AD VALUE**
$589,852

**KITS SOLD**
8,655

**STEM INFLUENCERS INVOLVED**
- Megan Smith: Chief Technology Officer, White House
- Xavier Harding: Tech Editor, Popular Science
- Kari Byron: TV personality and host

**SOCIAL ENGAGEMENT**
- 4-H CHANNELS: 1.9M IMPRESSIONS
- #4HNYSND: 6.5M IMPRESSIONS [681 POSTS]

**2016 Results**
- 506 REGISTERED EVENTS
- 3,400 VOLUNTEERS
- 86,000+ PARTICIPANTS
Beyond Drone Discovery

- Legal and Safe
  - Working with Risk Management
  - Academy of Model Aeronautics
  - FAA Part 107 certification

- Collaborating to grow a program
  - GGLEAD - ESRI Partnership
  - RC Flying clubs
  - CNY Drones
  - 4-H national network

- UAS and Remote Sensing: the extension model
  - Hardware and software
  - Engagement goes both ways

We can’t wait to unwrap the possibilities and #growcuriosity with young people and drones in #nys4H! Thank you @DJIGlobal for supporting #TrueLeaders and #4HNYSD!

University Photography