

CON EXTENSION



UConn 4-H S.T.E.M. Outreach Kit Program

Marc Cournoyer, Sara Tomis, Heidi Herz

University of Connecticut College of Agriculture, Health and Natural Resources

Beginnings and Beyond

the 4-H S.T.E.M. Outreach Kit Program was introduced videos created by Pam and her staff. to families in New London County Connecticut. 4-H Ed- The summer of 2022 also saw Marc Cournoyer take Lesson 3: The Environment - Activity: Nature Scavendistinct activity material packets based around a spe-Summer 2023 saw a return to an ocean theme with the tension YouTube page and could be viewed by anyone ed their own fishing nets and oil spill clean-up. with internet access.

Community partners were sought to assist with distribution of kit materials. Through an existing relationship with local libraries, Pam and her team were able to reach a broad audience in an effort to continue 4-H educational outreach during a time when face to face interaction was not available. COVID required educators across the country to find innovative ways to deliver program content and this was just one example of how this could be achieved. Each week's activities also links to supplemental materials including descriptive cards that connected the activity to a potential career reach series or additional relevance, children's book recommendations and the like.



4-H program assistant Sara Tomis demonstrates the inner working of a flower with the Monster Flower activity as part of the summer 2021 "Farm Tales" outreach program.

The first series was called "Farm Tales" and offered five unique, educational activity kits for youth to complete. The five activity themes were:

Lesson 1: Wind Farms – Activity: Paper Windmill

Lesson 2: Flower Farms – Activity: Monster Flower

Lesson 3: **Bee Farms** – Activity: Bee Bots

Lesson 4: Hog Farms – Activity: Iris Folding Pig

Lesson 5: **Fish Farms** – Activity: Koinobori Windsock



Koinobori fish windsock created as part of the tutorial video for "Farm Tales" lesson 5.

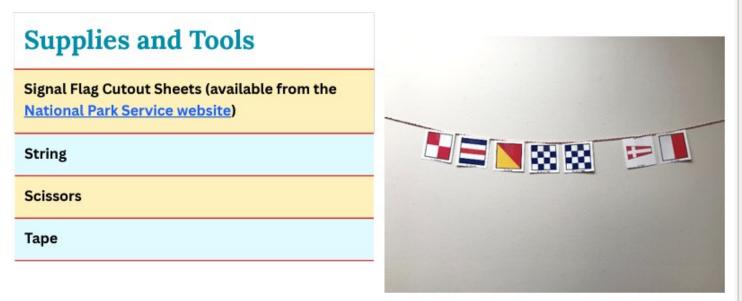
with the theme of "Ocean Discovery". This time the se- and focuses around conservation and environmental

ries focused on ocean life where participants learned awareness. The five activity themes are:

to learned about bioluminescence, how a submarine Lesson 1: Renewable Energy - Activity: Pizza Box Solar Started in the summer of 2021 as a way to reach youth works, the five oceanic zones and more. Again, youth Oven audiences during the height of the COVID pandemic, were equipped with materials to follow along with the Lesson 2: Vermiculture - Activity: Create Your Own

ucator Pamela Gray and her team partnered with local over as the 4-H educator for New London County with ger Hunt & "Bug Hut" Build libraries and other community partners to deliver edu- the retirement of Pam Gray. Upon Marc's arrival, the Lesson 4: Pollinators - Activity: Honey Bee Challenge cational kits to youth with STEM based activities that program added a second series to now provide sum- Lesson 5: Food Web - Activity: Food Web Board Game could be completed at home. The kits consisted of five mer and winter series with different themes each time.

cific theme. Each activity came with an instruction connection to the National 4-H STEM Challenge sheet and link to a tutorial video created by Pam and "Explorers of the Deep". Series lessons involved designher team that described the activity and how to com- ing a paper fish, learning about deep sea divers, the plete it. These videos were hosted on the UConn Ex- science of nautical flags, how tribal cultures construct-

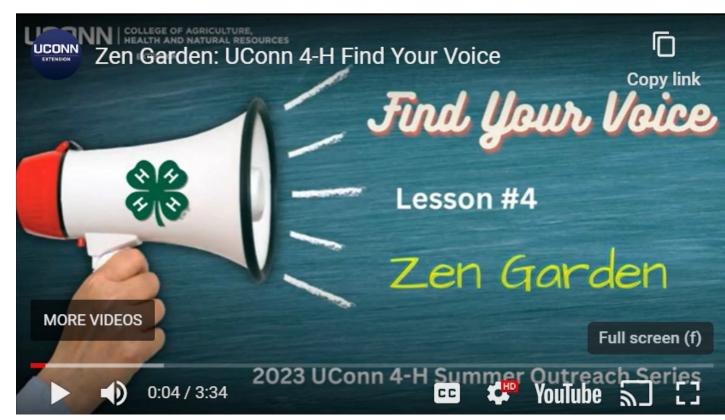


Instructions for creating a name sign with nautical flags as part of the "Explorers of the Deep" 4-H STEM Kit out-

In an effort to support the CT library summer reading theme, the program focused on personal empowerment in the summer of 2023 with the "Finding Your Voice" series. Lessons explored ways to find personal direction and fulfillment. Lessons were:

Lesson 1: Personal Puzzle - Activity: Individual puzzle Lesson 2: My Marionette - Activity: Marionette puppet brary Outreach program Lesson 3: A Light for Others - Activity: Stained glass candle holder

Lesson 4: Zen Garden - Activity: Tabletop Zen garden Lesson 5: Dream A Little Dream - Activity: Personal journal and postcard



Video intro card for Zen Garden tutorial video.

In the fall of 2023, Jennifer Cushman joined the project low to see the website. in an effort to expand the program beyond New London County. She worked with Marc and the team to create a pilot launch of the program in Hartford County with the winter 2024 series. The theme of the winter 2024 series focused on topics around the area of Healthy Living. Lessons explored financial literacy, physical activity and nutrition, mindfulness and emergency preparedness.

In the summer of 2024, the program was expanded to statewide distribution with the addition of Middlesex, and Tolland County. The ultimate goal is to have a presence in all eight Connecticut counties by early The program was again offered in the summer of 2022 2025. The 2024 summer series is called "Earth Agents"



Promotional materials for the summer 2024 4-H STEM Li-

Our Partners

Along with local libraries, the program has also developed fruitful relationships with the Mashantucket Pequot Tribal Nation through the USDA FRTEP grant program, and the NLON Naval Submarine Base CYP and MWR program in Groton, CT.

Partner agencies report that they love the program because UConn does all the content creation, kit assembly and "heavy lifting". All the partner agencies have to do is deliver the programs and record participant numbers. Currently each 5 activity kits costs \$15. For summer 2024 there are 275 kits being produced with over 1300 unique activities being distributed to youth throughout Connecticut.

To learn more about the program and ways that you could replicate it in your state contact Marc Cournoyer at marc.cournoyer@uconn.edu or use the QR code be-

