The Spring 2021 semester saw an expansion of Kupu's Natural Resources Professional Development (NR PD) Program with six educators participating from veteran schools Campbell and Kapolei High Schools alongside four educators from three new partner schools: two from Waipahu High School, one from Pearl City High School, and one from Hawai‘i Technology Academy. Furthermore, this semester's cohort was made up of eight new participants joined by two returning participants from our Fall 2020 cohort. Through the program, these 10 educators enhanced their knowledge of different natural resource careers and topics, with each educator's journey individually curated to expand on their interests and help fill knowledge gaps.

**Experiential Learning Requirements**
- View 4 presentations or webinars by natural resource professionals
- Conduct 2 one-on-one informational interviews with professionals in different natural resource careers
- Join 2 mini-externships to engage in hands-on learning experiences
- Participate in 2 post-secondary panels to learn about different areas of study in natural resources across the UH system

"Creating a lesson plan [focused on natural resources] challenged me to approach my class in a way I would have never previously attempted, and I am grateful for that"

Terrius Harris, Campbell High School

**Program Goals**
1. Expose teachers to different careers in natural resources so they are more informed and prepared to educate and excite their students about the range of natural resource careers that exist in Hawai‘i

2. Build connections between teachers and community partners to support future learning (guest speakers, field trips, student internships, etc.)

3. Increase teacher knowledge of natural resource topics and issues that can be integrated into their classroom curricula

4. Develop publicly-available lesson plans that increase student knowledge of natural resource careers

For more information about Kupu’s Natural Resource Profession Development Program, please visit: www.kupuhawaii.org/nrpd
EXEMPLARY EDUCATORS
EXPANDING KNOWLEDGE AND MEETING GOALS

The Spring 2021 cohort included educators from a range of disciplines and a variety of schools, providing the opportunity to determine just how effective the NR PD Program is for educators in Hawai‘i. Based on a comparison of the level of knowledge, comfort, and/or experience across 30 varying natural resource topics that were self-reported on by participants at the start of the program and again following the program’s completion, knowledge was shown to increase between 2-20% for all topics evaluated with an overall average increase of 13% across topics. This knowledge increase held for educators regardless of participant’s experience teaching, the subjects taught, or the school structure taught within.

[The program] helped me bring back my passion for natural resources... I want to bring some of my passion... into my classroom to share with my students and hopefully make them more passionate about natural resources and future careers

Jessica Stoerger, Pearl City High School

This evidence lends confidence that the NR PD Program is an effective work-based learning tool that increases participants' personal knowledge of natural resource careers and topics and gives them the resources and tools they need to pass on this knowledge to their students regardless of whether participants are just starting out in their teaching careers or have been teaching for 20+ years; whether they teach math at a public school or teach place-based learning at a charter school.

Teacher Participant Subject Areas
Environmental Science
Math
‘Ōlelo Hawai‘i
Building and Construction
Natural Resources

The biggest take away from this program are the connections... Through these connections, we understand and broaden our knowledge on conservation in Hawai‘i and what jobs, careers, internships, externships, and mentorships are available

Maile Resurrection, Kapolei High School

Of Participants:
100% felt the program was effective overall at meeting the first three goals of the program (80% for the final goal)

100% felt that the externships, 80% that the webinars, and 90% that the informational interviews and college panels were effective components of the program

90% plan on keeping relationships with partners/organizations met during the program

80% were interested in participating in the program again

100% were interested in participating in future Kupu teacher training programs

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A TEAM EFFORT
BUILDING A HOMEGROWN WORKFORCE

Following this second iteration of Kupu's Natural Resources Professional Development Program, we know that not only does the NR PD Program identify gaps that exist in natural resource education, illuminate the importance of filling these gaps, and provide a program model to begin to address these discrepancies, but that educators are in active need of connections to the necessary, relevant resources they can bring to their students.

Teachers are always looking for resources, inspiration, and ways to expand and enhance their lessons through partnering with community organizations, they just need to understand what kind of support is out there for them

Chelsey Jay, Community Partner, Mālama Learning Center

It's always a blessing to have support, because oftentimes we don't feel supported in our own little areas... [this program] provided us with such an opportunity and resources that we can connect with our students

Jeremy Soriano, Kapolei High School

Kupu's NR PD Program uses our "Career Tree" as a tool to illustrate the wide-range of natural resources careers available in Hawai‘i and ensure teachers learning journey includes both breadth and depth. We then help educators learn how they can bridge the gap for their students - from knowing about these careers to getting the experience and tools they need to enter the NR workforce.

There are a LOT more degrees and pathways related to natural resources than I was aware of

Sharon Schleigh, Hawai‘i Technology Academy

This [program] really confirmed that there is a place for every kind of talent within natural resources

Kisa Matlin, Waipahu High School

For more information about Kupu's Natural Resource Profession Development Program, please visit:
www.kupuhawaii.org/nrpm
MAHALO TO OUR PARTNERS!

Externship Sites

Bishop Museum ● Department of Land and Natural Resources, Division of Forestry and Wildlife
Ko‘olau Mountain Watershed Partnership ● Mālama Learning Center ● Mālama Loko Ea
Mālama Maunalua ● O‘ahu Invasive Species Committee ● Paepae o He‘eia

Informational Interviews

Adam Kurtz, Marine Wildlife Management Coordinator, National Oceanic and Atmospheric Administration
Blake Vance, Assistant Director, Hawai‘i Agriculture Research Center ● Brianne Imada, Youth Program Coordinator, Ma‘o Farms
Celeste Hanley, Education and Outreach Specialist, National Oceanic and Atmospheric Administration ● Chelsey Jay, Education & Community Partnerships Coordinator, Mālama Learning Center
Cory Yap, Environmental Researcher, Nā Wai ‘Ekolu ● Doug Harper, Executive Director, Mālama Maunalua
Erin Bishop, Education Coordinator, O‘ahu Invasive Species Committee ● Jason Mehlinger, Education Specialist, Department of Land and Natural Resources, Division of Aquatic Resources
Jenna Masters, Natural Area Reserves System Specialist, Department of Land and Natural Resources ● Kaea Sugata, Enforcement Officer, Division of Conservation and Resources Enforcement ● Keelan Barcina, Project Analyst, Mālama Pūpūkea-Waimea
Melissa Price, Assistant Professor, UH Manoa ● Natalie McKinney, Executive Director, Kōkua Hawai‘i Foundation ● Patty Miller, Education Coordinator, Hawaiian Islands Humpback Whale National Marine Sanctuary ● Rebekah Matagi Walker, Ko‘olau Project Manager, Hawaiian Islands Land Trust ● Roya Dennis, Career Pathways Manager, Elemental Exelerator ● Tianzhen Nie, Environmental Scientist ● AECOM Technical Services ● Ujay Siddharth, Climate Adaptation Research Analyst, Office of Climate Change, Sustainability and Resiliency ● Wally Ito, Limu Hui Coordinator, Kua‘āina Ulu
‘Auamo

Leeward Community College Panel

Donn Viviani, Professor ● Heather Takamatsu, STEM Counselor ● Daniella Elliott, Assistant Professor and Sustainable Agriculture Program Coordinator ● Alyssa McDonald, Assistant Professor and Marine Option Program Coordinator

UH System Panel

Albie Miles, Assistant Professor, UH West O‘ahu ● Mehana Vaughn, Associate Professor, UH Mānoa
Melissa Price, Assistant Professor, UH Mānoa ● Patrick Hart, Professor, UH Hilo ● Adam Pack, Professor and Chair of Psychology, UH Hilo

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