UH Ecosystems Work Program Needs-Finding Workshop Preliminary Results *updated 2022.09.09*

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At the 2022 Hawaii Conservation Conference the UH Ecosystems Work Program and the Hawaii Forest Restoration Synthesis team (led by Aurora Kagawa-Viviani [USGS PIERC/ WRRC/ HCSU]) conducted an online workshop to elicit challenges and needs within restoration/ conservation as well as how participants would like them addressed. Participants answered two main questions:

- To identify Needs/ Challenges: *How would you complete this sentence: "I would like more support with….."?*
- To generate Potential Actions/ Strategies: *What could support in these areas look like?*

The table that follows provides a condensed list of participant responses:

Topic	Needs/ Challenges	Potential Actions/ Strategies
Training	Participants expressed a need for clarity and standardization of conservation-related training for staff and also for emerging professionals. Training topics of interest include: • Weed identification and survey methods • Helicopter training • Firearms use • New technologies & developments • Drones, aerial tech, FAA permits	Elevate recognition of high skill and high training; have compensation to match it Collect and organize info from hiring organizations on training requirements for different kinds of positions; disseminate info thru schools, community colleges, UH, KUPU and HCA.
Continuing Education	Participants expressed a desire for: • Opportunities that fit with a work schedule • 1-2 year degrees or certificate programs at CC • University credits • Grad-level courses • Online PhD program	Develop asynchronous learning/ degree opportunities Disseminate info on existing programs
Collaboration, Community, and Communication	Participants expressed a desire for: • More on-site and across program learning opportunities • Increased student involvement	Have dedicated, fully funded FTE, non-grant funded Coordinator positions

*indicates ideas from Ecosystems Work staff generated while reviewing workshop notes

Topic	Needs/ Challenges	Potential Actions/ Strategies

	• Support for technical guides/informational resources
	• Strategic visioning and activity prioritization
	• TRUSTing relationships, including:
	   o Opportunities for communities to co-produce applicable science
	   o Effective facilitation of data sharing, reciprocity
	• Better communication between:
	   o Programs; Admin & Programs; Agencies, university, and community; Experienced folks & new hires
	   o Different sectors and scales of management (local, island, state-wide)
		Create an Ecosystems Extension Website
		
		Provide opportunities for in-person gatherings and site visits to build connections with like-minded people as well as across roles to share what folks are working on and Lessons Learned.

Problem Solving & New Technology	Trials and working groups to identify needs/applications, E.g: • On herbicides and pesticides • Forest bird issues and threats like rats • Predator control • Insect pests across agriculture & conservation • Phytosanitation • Seed sourcing • Resist-Accept-Direct framework Conflict resolution training/service for non-profits	Follow model of invasive pest mini conferences - drop in, connect, learn what research is going on Develop One-stop online shop to access training videos, webinars, etc. easy to direct new staff. Provide/ advertise tiered training opportunities for herbicide application Provide site-specific support through convening variety of experts
Data	Management of and access to environmental data Need data on: • Site history and legacy impacts of invasions & land use • Non-ecological benefits of restoration • Pests and diseases for native plants • Downscaling climate models and predictions to apply at the project level • Maps on biome/community shifts from 3 climate scenarios	Database of research conducted - historic and current • Can see what was done and where gaps Create Maps of restoration efforts with abstract/short paragraph on project; Eg: case studies. Develop awareness of benefits of monitoring; identify barriers (methods and capacity)*

*indicates ideas from Ecosystems Work staff generated while reviewing workshop notes

Topic	Needs/ Challenges	Potential Actions/ Strategies
Job Security/ Jobs	It's challenging to recruit good local candidates. • Lack of competitive/ living wages and job security for more people • People need security for confidence in building a career in conservation. Need to value and develop people within organizations as a critical resource to ensure program longevity	Provide support and information that encourages government funding through direct program budgets instead of grants. Create and/or identify professional pathways for local workforce
Funding	Need to share positive stories for advocacy/funding Institutional hurdles • Reporting burdens from funders • Short-term budgets • High indirect costs for 'off-campus' projects • Limited options/mechanisms to support partners/students/communities	Provide support for grant writing Mapping out payment mechanisms to support partners/collaborators (Eg. honoraria, casual/temp hire, contract work)*
Planning & Assessment (from practice workshop)	Need for well-defined restoration targets and culture/ place-based metrics on multiple planning time scales Need efficient, effective, and long-term monitoring on the scale of decades for evaluating long-term success	Develop/ disseminate standardized list of research questions and basic monitoring methods and when to use them. Provide consultations on how best to monitor for goals Create a statewide monitoring program (for native ecosystems & restoration sites) to shift the burden of monitoring from overextended management programs to a dedicated program

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