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Priority	Research Topic	Genus/Species and comments
3	Restoration: Inbreeding/Outbreeding Depression and Heterosis	Schiedea.: Consideration of the mating system and its impact on restoration and genetic diversity of the restoration population is critical to consider if a population is to be self-sustaining.
3		Wide variety of genera and species
3		Kokia, Erythrina, Gardenia
3		Hibiscus waimeae subsp. hannerae, Capparis sandwichiana, Schiedea apokremnos, Brighamia insignis, Cyanea leptostegia, Hesperomannia lydgatei, Kadua fluviatilis, Phyllostegia electra Phyllostegia renovans, Platydesma spathulata, Strongylodon ruber, Gardenia remyi
4	Restoration: Inbreeding/Outbreeding Depression and Heterosis	Cyanea, Clermontia, Delissea, Brighamia, Lobelia, Trematolobelia
4	Restoration: Inbreeding/Outbreeding Depression and Heterosis	Metrosideros; although this takes time, only through controlled crosses can we see the consequences of mating within highly genetically isolated species and mating between closely related taxa. Both can be important for conservation.
4		Lobeliads

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Priority	Research Topic	Genus/Species and comments
1	Restoration: Outplanting Methods (seed sow, planting techniques)	Nothing in particular, but an increased emphasis on more common natives, instead of just PEP and ESA species would be a good thing for the long run.
1		Santalum Brighamia Hibiscus
2	Restoration: Outplanting Methods (seed sow, planting techniques)	lonomea, wiliwili, koai'a, naio
2		Sesbania tomentosa - Kauai ROI; low survivability when out planting. Large numbers of plants have been out planted with few survivors.
2		More research and experiments with outplanting methods to somehow enhance the competitiveness of native plants. Figuring out a way to help outplants establish quicker/easier with less follow-up management.
2		Polyscias bisattenuata
2		Determine ideal size (size of pot) or method (seeds, cuttings etc..) for reintroduction of species to the landscape
2		For many taxa that require restoration we are still determining the best techniques. I feel this is second priority.
2		All native plants
3	Restoration: Outplanting Methods (seed sow, planting techniques)	In line with assisted colonization research needs, we need to identify the proper outplanting techniques for species likely requiring assisted colonization so when the time comes, we have the techniques needed.
3		We should rethink our current paradigm of out planting and move toward direct seed sowing
3		Goes hand in hand with soil seed bank. Study of locations and previously employed techniques would be helpful.
4	Restoration: Outplanting Methods (seed sow, planting techniques)	information on improving outplant success is important: size of seedlings at planting, nurse/facilitator plants, invasive plant control, etc. We have done some work on seed broadcast but this is an area of interest and how greater seed establishment can be achieved.

Priority	Research Topic	Genus/Species and comments
5	Restoration: Outplanting Methods (seed sow, planting techniques)	No species of preference, but outplanting methods seems of higher importance than other restoration research, because it has practical utility compared to systems design or inbreeding depression research.
5		Many species

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Priority	Research Topic	Genus/Species and comments
1	Restoration: Strategy and Design	Vicia menziesii - implementation of restoration in historic range. Multi-site planning to determine if limiting factors are the same or vary between sites
1		Short-lived as well as long-lived species. Concentration on Dry and Mesic species. Determine "outlook" in long-term for species with missing pollinators.
1		full scale restoration is not economically feasible so what approach do you take that best facilitates natural recovery? This includes species composition, density of planting, arrangement of vegetation islands. What type of restored forest has native recruitment and limited invasive species issues. As forest recovery is stimulated is there a strategy that is most beneficial to attract birds, bats insects etc. In addition, can climate ready forests be created? What I am thinking here is mostly for mesic forest that could be restored toward the drier end to be more resistant to drought. Or possibly how does seed source impact drought resistance.
1		Common Hawaiian fern species, including: Cibotium spp., Microlepia spp., Cyclosorus spp.
1		Identify methods which increase chances of success (recovery of listed species - natural regeneration). Identify species which are more likely to be successful in restoration projects with minimal follow up. Determine which species may be better for in situ vs ex situ conservation. Identify the amount of acres that need to be protected in order to recover species or suites of species.
1		Any appropriate native species, both common and threatened for each ecotone being addressed. Development of modified/updated plant communities for current and future conditions for each ecotone to allow for a more successful establishment of 100% native, diverse and multistoried system. Focus on ground cover and grasses for infilling tree and shrub plantings. Techniques and strategies for implementation in remote, rough, steep or difficult to access terrain.

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1	Restoration: Strategy and Design	Asplenium peruvianum, Erythrina sandwicensis, Colubrina oppositifolia, Chrysodracon hawaiiensis, Delissea undulata, Haplostachys haplostachya, Hibiscus brackenridgei, Hibiscadelphus hualalaiensis, Kokia drynarioides, Melicope hawaiiensis, Meterosideros polymorpha var incana, Mezoneuron kavaiense, Neraudia ovata, Nothocestrum breviflorum, Portulaca sclerocarpa, Reynoldsia sandwicensis, Silene lanceolata, Solanum incompletum, Stenogyne angustifolia, Zanthoxylum dipetalum var. tomentosum, Zanthoxylum hawaiiense, Stenogyne angustifolia
1		It is very important to develop ecological based restoration targets - i.e., what are the short-, mid-, and long-term goals of a restoration effort; what do you want this community to look like (population structure and composition) in 50 years?
1		Native Hawaiian ecosystems with a focus on Kauai. It seems like a whole lot of folks are doing stuff, but without the research needed to inform the actual actives.
2	Restoration: Strategy and Design	N/A, depends on site
2		Abutilon sandwicense, Alectryon macrococcus macrococcus, Erythrina sandwicensis, Eugenia koolauensis, Euphorbia celastroides kaenana, Euphorbia herbstii, Flueggea neowawraea, Hibiscus brackenridgei mokuleianas, Pleomele forbesii, Pritachardia kaalae, Pteralyxia macrocarpa
2		I would like to see less air conditioned room planning (meetings) and more on the ground actual testing of sites to identify more appropriate restoration sites. Please contact Dr Rob Robichaux and utilize his expertise on this subject as well as studying his successful projects. Ask for his recent paper on Silversword and Lobeliad restoration.
2		mints

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Priority	Research Topic	Genus/Species and comments
2	Restoration: Strategy and Design	All species! Although it's been said time and time again, landscape protection is the way to go! I understand that these kinds of mechanisms are often met with public scrutiny and misinformation, but thinking on an ecosystem level is beneficial to all organisms and relationships that we have yet to understand. In terms of design, RR and his dedication toward ArgSanSan and genetic bottleneck populations is a great example. We have begun to see recruitment in the augmented population, but with few founders flowering between 1976-2016, successes take time! He is also great in HAVO at the CCC unit in species densities per area, equal founder representation, etc.
2		Need research in development of weed control intervals for site (when to follow up/revisit for weed sweeps), how large an area should be native dominated in order to be considered a stable 'forest', what percent native dominance to be considered 'stable' native forest, also important to build off functional traits program (need research on more native plant species functional traits) in order for the program to be useful
2		Cheirodendron trigynum, Myrsine lessertiana, Coprosma rhynchocarpa, Rubus hawaiensis, Leptecophylla tameiameia, Vaccinium calycinum, Acacia koa, and Metrosideros polymorpha
3	Restoration: Strategy and Design	Better techniques for building resiliency into restoration sites
3		Phyllostegia kaalensis
3		Anything that would affect the way we do rare plant restoration (i.e. inbreeding/outbreeding, genetic differences/similarities, breeding information, seed sowing trials of rare stuff, etc.) in ways to increase the fecundity, genetic diversity, plans for species withstand/survive climate change, etc. We need more tools to help us with rare species.
4	Restoration: Strategy and Design	Sesbania, Scaevola coriacea, Pittosporum halophylum, Brighamia rockii, Centarium, Canavalia molokaiensis, Santalum ellipticum, Tetramolopium
4		Hibiscus waimeae subsp. hannerae, Capparis sandwichiana, Schiedea apokremnos, Brighamia insignis, Cyanea leptostegia, Hesperomannia lydgatei, Kadua fluviatilis,

Priority	Research Topic	Genus/Species and comments
4	Restoration: Strategy and Design	Phyllostegia electra Phyllostegia renovans, Platydesma spathulata, Strongylodon ruber, Gardenia remyi.
5	Restoration: Strategy and Design	Much of restoration in Hawaii and worldwide has been triage or natural resource managers doing the best they can with the resources they have on the ground. A better, more informed approach would be scientifically designed experimental reintroductions with long term data collection (for rigorous statistical analysis) in addition to long term monitoring. This can only happen if researchers and land managers collaborate. Again, this needs to happen for much of the flora, including rare taxa, but certainly also ecosystem level restoration with suites of common natives.
5	Restoration: Strategy and Design	Figure out mixes or designs that will make for the best micro-habitats for outplantings and species and optimize conditions for large-scale success.