

## Report on BIISC committee meeting June 3, 2010, Hilo.

### Action Items and Meeting Follow-Up

**Produce SurveyMonkey** to engage group in criteria review

**Test species** against at least 2 criteria systems (scheduled week of July 12)

Next Committee Meeting: To be held in Waimea in mid-August. The meeting will focus on selecting rapid response targets, forging partnerships, and determining next actions.

**Recommended:** Early Detection (ED) team contact nearest reserve managers when invasive plant spotted on roadways in their area.

*Thought:* translate this to regular briefing emails?

**Produce** a PCSU Tech Report on our ED and rapid response program to date.

**Participate** in PBIN (<http://www.reportapest.org>) reporting system

A proposal to the F.S. for statewide early detection support also may contain funding to develop a statewide rapid response criteria system. Funding exists to hold a statewide workshop to assess methods.

### Meeting Discussion:

**Attendees:** David Benitez, NPS; Colleen Cole, Three Mountain Alliance; Linda Pratt, USGS BRD; Laura Nelson, The Nature Conservancy; Hans Sin, DOFAW; Bill Martin, Hawaii Wildlife Fund; Julia Parrish, Pohakuloa Training Area; Kim Tavares, NPS Coqui Program; Brad Sheen, intern HWF, Elizabeth Speith, PBIN; Ann Marie LaRosa, USFS.

**BIISC Staff:** Jan Schipper, Raymond McGuire, Page Else, Ken Temple, Jean Franklin, Shannon Karratti, Bobby Parsons, Jimmy Parker, Zethus Lorenzo, Dustin Figuora

### Quick review of ED program progress to date

- ◆ Major emphasis of program is to update what Bishop Museum has recorded for naturalized
- ◆ Driving roads 2 years now, starting May 2007
- ◆ 1500 miles roads surveyed, 46 new naturalized records
- ◆ Ka'u, South and North Kona, South and North Kohala, Upper Puna (S. Kopua Rd up to Volcano)

### Rapid response targets so far

- ◆ Pampas grass, wax myrtle, *Buddleja madagascariensis*, *Cryptostegia madagascariensis*, *Jasminum polyanthum*, *Parkinsonia aculeata* – 2 cultivated trees in Kona yard controlled, *Paulownia tomentosa* - Waimea (latter 2 success stories), Cherokee Rose controlled in Volcano, just found in Pauillio.

### ***Rapid Response Criteria***

BIISC goals for criteria:

- ◆ Minimize subjectivity
- ◆ Preliminary evaluation and ranking should be based on biology; not practicality or resources needed
- ◆ If species ranked high, then further study, fundraising and partnerships would be sought
- ◆ Adaptive system
- ◆ Process for dealing with uncertainty

**Question:** This discussion is focused on ranking for Rapid Response, what about ranking species to figure out priorities for population delineation? This is a hot topic for other ISC. A ranking category could be created, similar to the OISC system, that suggests species for immediate response and others for further study.

### ***Rapid Response Ranking Systems***

The ED team has reviewed ranking systems from Australia, New Zealand, OISC, California, and Nature Serve. The Hawaii Exotic Plant Assessment should also be examined by the team. HEPEP was first created in conjunction with the Hawaii Weed Risk Assessment protocol but has not been maintained. The Hawaii WRA was intended to be a screening tool for imports, and HEPEP the next step to evaluate plants already here,

#### *Discussion of OISC system*

*Pros:* Already developed, presented to stakeholders, field tested, currently under revision, ranking produces useful categories of species

*Cons:* Subjectivity, can be difficult to implement.

The last step is the priority ranking into categories; which is a combination of weediness group and the score assigned for practicality of control.

*Discussion of California protocol (handout distributed; ED team ranks this as the best template for BIISC adaptation)*

*Pros:* Section on invasive potential is a good assessment tool-for cross-examining with WRA. Biological attributes are separated from ecological in different sections. Section 3 reviews impact and distribution.

Multiple choice answers takes into account ecological types for limiting spread

*Con:* Ranking too simple (low, medium, high)

Heavy emphasis on preserving conservation land and native species

Requires trend assessment over long durations

Don't always know what ecological types the species has the potential to invade

New Zealand

*Pro:* has objective ranking on area occupied,

*Con:* our surveys are still figuring out what is meaningful breakpoints, our methods have to be looser because we don't have quantitative information.

### ***Factors discussed***

*Modeling and how finely to identify ecological type where infestation located:*

General types like 'closed forest' probably adequate.

Counter: invasive plants can behave very differently across zones, too general will not capture differences

Ecological types could use classes developed by HEPEP (were defined via lots of expert discussion)

Best practice will end up somewhere between HEPEP ecotypes and California system

Lack of data will limit ability to use models

Discussion of ranking scores; categories too general?

For first cut coarse ranking may be acceptable

### ***Uncertainty and Weighting Scores***

When data is not available, how does uncertainty affect the risk estimation? One method is to give the same score to a yes answer and an "I don't know" answer so they weight the analysis equally. See the discussion of this topic in the Outcomes of the WRA workshop.

### ***Criteria Discussion:***

*Weediness elsewhere:*

Concern: this factor has a lot of weight so answers are skewed when not enough is known about species that behave differently in Hawaii.

*In retail trade.*

Need outreach on these plants with the nursery industry. This factor can't be a total deterrent to treatment because it could force waiting until it's too late, the species has become too well established..

*Number of private properties infested and the number with access permissions.*

OISC is adding these criteria. Vital.

*Shade tolerance*

This factor is viewed as important indicator of threat to native forest

*Fire hazard*

Priority criteria for leeward and dry areas.

*Invasive elsewhere*

This is one of the most revealing and important criteria.

*Impact on surrounding ecosystem*

BIISC crew sees this as an important criteria. For instance, learning from BIISC rapid response trials: *Buddleja* was observed to choke ohia, Pink Jasmine was much more benign while still spread heavily over native vegetation.

#### *Pollinators present*

The presence or absence of a pollinator can greatly affect an exotics spread. Scores must be periodically reevaluated when new pollinators arrive.

#### *Hawaii WRA score*

propagule pressure and invasive elsewhere drive WRA score, but only if there is published literature out on it. Scoring is limited by amount of available data.

Concern: can't rely on this score alone. Management needs as much information about plant as possible. Across the Pacific there is great variation in invasiveness within the same species and the reasons aren't always clear.

### ***Monitoring Discussion***

Monitoring needs could be species specific, depending on longevity in seed bank.

Other Viewpoint: monitoring should be done in perpetuity, to allow for unusual events or reintroduction.

### ***Species specific discussion***

A subset of the species found by the Early Detection team was quickly reviewed by the group to determine which species should be evaluated against the rapid response criteria. A consensus was taken on a few of the species that were too widespread to become rapid response targets. For most species, it would be instructive to rank them against a couple of the criteria systems (to be done in July).

### ***AFTERNOON SESSION***

**Attendees:** David Benitez, NPS; Laura Nelson, the Nature Conservancy; Julia Parrish, Pohakuloa Training Area; Kim Tavares, NPS Coqui Program; Elizabeth Speith, PBIN; Raymond McGuire, DOFAW; BIISC Staff as listed above.

#### ***Discussion of spatial and survey issues:***

- ◆ It was felt this should be determined on a species by species basis and site by site, not by rules.
- ◆ Buffers around known points can look comforting on a map but freak events can still affect dispersal patterns.
  - Ideally these populations would be dealt with on a case-by-case basis but the drawback is not having a standard when reporting
- ◆ Survey results could be reported to committee members for feedback to see if additional locations will be reported.
- ◆ BIISC is investigating the use of remote sensing technology for population delimitation.
- ◆ The roadside surveys should be used in addition to other corridor surveys – trails, fencelines - to refine areas for further surveys

- ◆ Involve local residents, have centralized reporting system
  - Could use Google Earth component inside the reportapest.org website
- ◆ It is important to survey conservation lands because one of BIISC's end goals is preventing extinctions.
- ◆ However, the goal for incipient plants is to prevent establishment, so must be surveyed wherever they occur.
- ◆ Interpolation and initial focus on hot spots might be good techniques.

### ***Community Relationships***

- ◆ Need to be sure of species targets when approaching community, will be long-term relationship.
- ◆ Examples from other islands can be vital to convince people of problems (more effective than explaining target selection criteria process)
- ◆ When approaching private landowner for plant removal, do not use the word eradication. It will be best to be able to offer a restoration species.
- ◆ BIISC has funding to build community Eyes and Ears programs (early detection citizen outreach) in Waimea and Volcano.
- ◆ Media articles help people become more responsive to problem.

### ***Production of Field Guides***

- ◆ Conservation managers would like to have them for their field crew
- ◆ Production by district in a binder format would be a practical format, printed directly onto plasticized paper.
- ◆ *Decision points that need to be made:* Target audiences, Target species, target criteria (eg. Actionable), and program goals (distribution mapping, or prevention of planting, or encouraging retailers not to sell)
- ◆ Guides should also be distributed to libraries and schools.
- ◆ There should be multiple reporting mechanisms; Internet, phone, mail.