

**2007 Forest Health Monitoring Working Group Meeting, San Diego, CA
Invasive Plant Focus Group
Meeting Notes and Resolutions**

Gary Smith: Introduction

- Introduce Andi, Recognize contributions by Mike Shephard
- Group Introductions

Beth Schultz: FIA and Invasive Plant Monitoring (P2 and P3)

- Powerpoint presentation: FIA overview,
- FIA units have invasive plant lists incorporated into P2 plots. Development of “core” optional protocols for collection of invasive species data and other data types that go beyond the standardized national data format. The core optional protocol includes a subplot search, giving % cover. The list of species became unwieldy (246 spp. nationwide). 15 species made it to the national list.
- Plans for 2007: Northern Research Station will implement the core optional protocol on 20% of P2 plots (45 spp.). Interior West, PNW, and SRS will continue with current protocols. In 2008, there may be more national implementation of Core method with maintenance of regional lists.
- P3 veg indicator: complete census of vascular plants. Allows comparison of species in multiple categories. Covers only 1/16th of grid. Will be fully implemented in Northern region, WA, AK.

FIA Discussion

- Comments clarifying the role of FHM in clarification of role with FIA.
- Concerns over the standardization process. Too much variation exists across the nations ecosystems to allow for total standardization. Data usefulness may be lost with too much standardization. The lists must still allow for regional/state needs.
- There wouldn't be shrinkage in data collection through the standardization (per Beth).
- Suggestion that FIA review the NFS process for sensitive species data collection.
- Comment that FIA crews are often the only folks getting into remote areas, and therefore may play an important role in EDRR (except for limitations in plot confidentiality). Variability in crew makeup can create data inconsistency. EDRR through the plots is not focused, it's more of a “needle in a haystack”.
- **Comment that the flip side of early detection is that FIA crews need to incorporate sanitation practices into their operations to avoid vectoring species to remote locations.
- Discussion on barriers to implementation of P3 plots in areas outside the PNW (cost, botanical skills, etc.).
- Discussion of other sources for weed lists (Natural Heritage program, NBII

- ❖ Standardization of approach with allowance for regional flexibility in species selection.

RESOLUTION:

FIA efforts on P2 & P3 plots are an important means for monitoring long term trends in invasive plants in the nation's forests.

- **Therefore FHM should support full nationwide implementation of these efforts.**
- **In addition, FHM should support, and assist as requested, in the developing a nationally standardized protocol for the selection of regionally important invasive plant species.**

RISK MAPS:

Yellow Starthistle Risk Map (Powerpoint)

- ❖ Why is it a good candidate for risk mapping?
 - This project “fell” into the lap of Gary and will be conducted without use of additional funding.
 - Currently occupies only 10% of potential ecological range.
 - Areas in infested states are still relatively weed-free.
 - Limiting ecological factors are relatively well-known (no more than 40% canopy, no “wet feet”. No xeric sites)
 - Long range dispersal from human movement.
 - Relatively easy to control
 - Not being planted
 - Ongoing inventory and control programs in all western states.
- ❖ FHP-FHTET will coordinate risk map effort (for the Western Weed Committee).
 - Collect and integrate existing inventory data
 - Review ecological factors and relate to existing available data.
 - Review existing pathways/vectors
- ❖ GOAL: locate and eradicate satellites, control vectors of spread,
- ❖ Three “zones” Zone 1: eradication, Zone 2: control, Zone 3: containment (biological control, but not more than that).

- ❖ Risk Map will include: Areas infested, areas at risk. Areas with high or low probability of risk. Does not include a quantification of the resources at risk. That makes it different than the Insect and Disease risk map. Risk of spread and risk of establishment.

- ❖ There is already data on the impacts of this species in sites where it gets established. The analysis of those types of loss will be a possible second step to the initial risk map. University of Idaho has good data for some of this.

- ❖ The map will allow for: strategic allocation of resources, quantification of acres protected, communicate with public, communicate with decision-makers.

Cogongrass Risk Map

- ❖ Pilot Risk Map from 2006 Focus Group session.
- ❖ SE focus in response to the historic Western emphasis. Good candidate for remote sensing. Opportunity for remote sensing to fill in data gaps in current state data.
- ❖ Reviewed several candidate species (Chinese tallow, Chinese privet, etc.), and selected cogongrass.
- ❖ The relatively limited occurrence of this species in GA provides an opportunity for EDRR in that state.
- ❖ Discussion of occurrence in Oregon, does this mean that the map will be extended to a national risk map?
- ❖ The reason for the smaller focus area in SW GA is to allow for the fine-tuning of the remote sensing approach (\$\$\$), and then lead to a possible expansion in the SE and then into other areas of the United States.
- ❖ There is a secondary component that overlaps with the National Insect and Disease Risk map, with major timber resource loss events serving as possible pathway/vector events to allow movement on heavy equipment.
- ❖ What about the regulatory side?

Remote Sensing Discussion (Everett Hinkley)

- ❖ Fire mapping is easy whereas Forest Health mapping is more difficult.
- ❖ How can remote sensing be used in FH?
- ❖ Model risk of invasion, mapping and monitoring, educate the public.
- ❖ Stratified approach from ground level to satellite level.
- ❖ Issues are of space and time (daily, seasonal, annual, etc.).
- ❖ Remote sensing is most effective at later stages of a forest health impact, but the greatest need for detection is at the earliest stage.
- ❖ NAIP (National Aerial Imagery Program)– color imagery for the states with 2m resolution (1m resolution in some areas).
- ❖ In there a species list for the species that can be detected with remote sensing.

RESOLUTIONS:

Continue support for pilot projects and look for opportunities to expand their applications and coordinate with other risk mapping efforts.

State of Hawaii

Has a pilot project working with the Carnegie Institute (Airborne hyperspectral with LIDAR). Developed in response to a “need” for an “aerial survey program”. Using existing ground plot data for ground truthing the data from the Carnegie project.