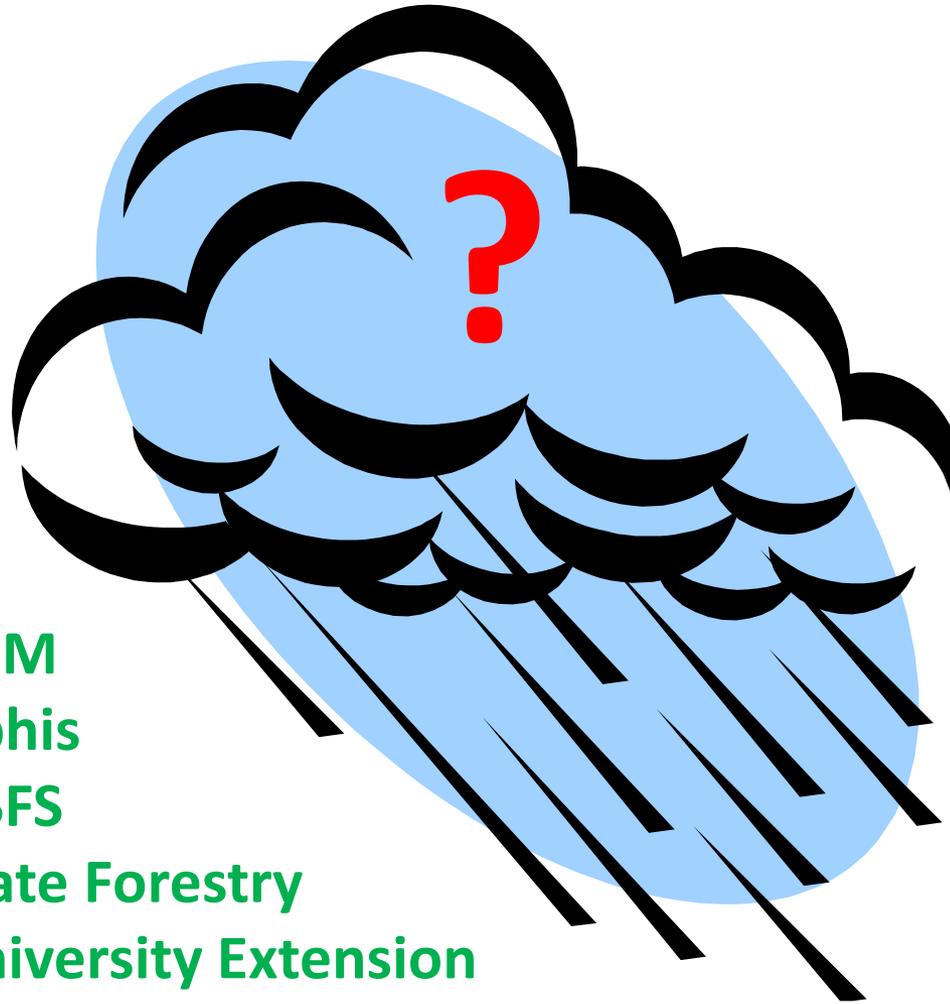


What is the role of FHM in “Invasives” work– should we have a role?

“Invasives”:

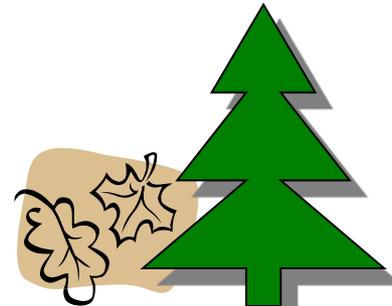
- Plants
- Insects
- Disease
- Earthworms
- Exotic



Who does What? Where? When? And How?

- Detection,
- Evaluation,
- Reporting,
- Regulation
- Control
- Eradication

1. FHM
2. Aphis
3. USFS
4. State Forestry
5. University Extension
6. Citizen Monitoring
7. Master Gardeners
8. Urban/City Forester
9. County Ag. / Rural Forester



2010 “Invasives” Focus Group

Recommended resolutions:

1. FHM should develop a list of places to get ideas:

- **Citizen Monitoring:**

- Alaska – List of critical/threatening invasives
- CA Pest Reporting System
- Texas – Citizen Scientist Program (Invaders)
 - texasinvasives.org

2. FHM should inventory existing “Invasives” Programs & make the information available on the FHM website.

FHM-MT explore action protocols and linkages to databases for detection/reporting; allow us to review “Detection of Invasives”. We need a place to receive information/data – Pest Event Reporting System (PERS)

3. Whereas exotic earthworms are widespread in many parts of the United States, & whereas these earthworms are capable of destroying much of the litter layer in some forests, & whereas the impacts of earthworm activity are only starting to be understood and documented. Be it resolved that **the FHM-MT explore opportunities to incorporate assessment of earthworm density and impacts into the FHM Program**

Notes from Discussion during the FG:

CM – each state develop their own

University – Extension or USFS – or State Forestry

Definition of Invasives –

AK - List of threatening invasives –

What is FHM trying to accomplish by surveying Inv. –

FHM can help with detection work – reporting system - - FHM could help with tech. support to set-up system – CA pest reporting system

TX citizen scientist model – applying for a grant

Plants – bugs - pests – careful use of “invasive” keep it an adjective

1. FHM – MT role explore and action protocol and linkage to databases for detection/reporting – review detection – Review existing programs
2. FHM should have a limited role – but don't do what other people are doing –
3. What is our role – should we have a role -

FHM helps start Invasive work with Detection Monitoring – FHM helps with Technical Support to set-up a “system”

I FHM happy with what FHM is doing?

Detection or evaluation - have to rely on other partners doing detection
FHNM has never done EARLY detection –
Evaluating the impacts

What is available already – FHM good at recognizing Damage

Don't try to incorporate too many pests

FHM - what do we want to my – where is the Line – Urban – just insects/diseases- NO

Info gathering or availability – what's already available – what would be helpful – “TX has a great program”

Listing of places to get ideas –

Need a place that receives the info/data – Can we be a repository

Earthworms – whereas earthworms are a concern – FHM needs to develop more ways to declare earthworm assessment –

Inventory CM programming in each state and make info about these available on the FHM website

2010 Focus Group – **Detection of Invasives:**

How should FHM be involved in
“Invasives” work?

Invasives Work:

1. **Detection by
Partners/Cooperators/Regulators**
2. **Detection with Citizen Monitoring**
3. Survey – types, standardized, QA/QC
4. Reporting
5. Risk Mapping

Recent “Invasives” Resolutions:

1. Citizen Monitoring:

FHM support the development, testing, and publication of **toolkit protocols to facilitate Citizen Monitoring efforts** for invasive plant detection/impact monitoring and plot-based assessments of forest condition in unique areas that are too small to be evaluated by the P2-P3 grid (e.g. urban parks, counties, linear features).

Publication of “How To Work with CM”

2. FHM-MT examine **the role of FHM** in community detection surveys and address appropriate urban FH partnerships

3. The FHM should actively support research and monitoring that demonstrates the value of **stricter state firewood transport regulations**. The FHM MT should task someone to develop and **post a list of sources for APHIS pest advisory information, including an explanation of roles and responsibilities within and between agencies** associated with early detection.

4. P2 and P3 plots are important for monitoring long term trends in invasive plants – therefore FHM should **support full nationwide implementation** of these efforts – Assist in developing a nationally standardized protocol for the **selection of regionally important “invasives”**

5. To ensure successful early detection and rapid response to “Invasives” – FHM should investigate **host data development to support risk mapping**



2006 Invasive Insects and Pathogens Resolutions

1. Explore existing models where FHM and/or Regions have been successful in detecting and monitoring exotic species.
2. Explore opportunities to improve data sharing and flow by:
 - standardizing exotic forest species survey data collected by FHM and partners
 - supporting the development of an online, geospatial database.
3. To ensure the successful early detection and rapid response to exotic species, FHM should investigate host data development to support risk mapping.
4. FHM should encourage FHP to continue to conduct risk assessments, pathway analysis on exotic species in other countries.
5. Establish a protocol for the delivery of GIS risk products, available by state and/or Regions.



Invasive Insects and Pathogens – Current Status

- FHTET continuing work on development of risk maps for introduction, establishment and impact of individual invasives
 - Completed maps for *Sirex noctillio* and *Ips typographus*
 - Map for *Phytophthora alni* in progress
- FHTET is assessing opportunities for data sharing via online geospatial tool



2006 Invasive Plant Resolutions

1. Coordinate/sponsor NFS, FHP, and cooperator development of specific objective-based criteria to be used to create a "short list" of priority invasive plants by ecoregion for use by FIA field staff in Regional add-ons to P2 plots.
2. Charter a working group to explore the need, purpose, objectives and scope of 1-2 invasive plant risk map pilot projects, and fund 1-2 group meetings to produce a "white paper" proposal on feasibility and a concept-level prototype.



Invasive Plants – Current Status

- Provided input to FIA in developing Regional lists of invasive plants to inventory
- Working Group on risk mapping of invasive plants
 - Developing map for cogongrass in the South
 - Plans for yellow starthistle map in the West

1. *The Management Team should examine the role of FHM in community detection surveys and address appropriate urban forest health partnerships.*
2. *FHM Management team will create a team of representatives with expertise of each tool to develop a tiered, integrated pilot to forest health detection surveys in communities.*

1. 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 endorse and assist as requested, in developing a nationally standardized protocol for the selection of regionally important invasive plant species.
2. Continue support for pilot invasive plant risk mapping projects and look for opportunities to expand their applications and coordinate with other risk mapping efforts.

2009

Early Detection of Invasive Pests Within the FHM Program Resolutions

1. The FHM MT should actively support research and monitoring that demonstrates the value of stricter state firewood transport regulations.
2. The FHM MT should task someone to develop and post a list of sources for APHIS pest advisory information, including an explanation of roles and responsibilities within and between agencies associated with early detection.
3. The FHM MT should use the EM Program to encourage the production and posting (outside the FS firewall) of case studies describing recent responses to invasive outbreaks.
4. The FHM MT should take advantage of opportunities to support overseas monitoring programs (such as the Sentinel Plant Network) for invasive pests of North American species.
5. The FHM MT should expand Detection Monitoring by implementing an exotic pest monitoring training program for city arborists and slash disposal crews directly in contact with the wood.



Detection of Exotics in Communities Current Status

- FHP and UCF developed proposal for a national urban forest health monitoring program that incorporated components for detection of exotics.
- Status of program presented b Gary Man on Tues.



Invasive Plants – Current Status

- The FIA management team has approved a change proposal for a nationally-consistent invasive plant protocol on P2 plots that uses regional lists.
- FHTET and RSAC conducted test of high resolution aerial photography of cogongrass – not distinguishable from surrounding vegetation
- FHTET is evaluating existing inventory/location data on yellow starthistle collected by W. Weed Coord. Com.



Detection of Exotics in Communities

- 1. The Management Team should examine the role of FHM in community detection surveys and address appropriate urban forest health partnerships.*
- 2. FHM Management team will create a team of representatives with expertise of each tool to develop a tiered, integrated pilot to forest health detection surveys in communities.*



Detection of Exotics in Communities Current Status

- FHP and UCF developed proposal for a national urban forest health monitoring program that incorporated components for detection of exotics.
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