Eastern Invasives Management Network
Workshop #3, March 2003

Kissimmee Valley Landscape Conservation Area, FL

1) What conditions would have to prevail to allow you to reduce (or maintain) the invasive species threat rating (s) on your conservation area to MEDIUM or LOW. Use condition statements to form objectives for your conservation area and where possible state them in quantitative terms. For invasive species threats currently rated as VERY HIGH, state the conditions that would have to prevail in order for it to be rated one level lower.

Pine flatwoods mosaic

Threat – Lygodium microphyllum/ Old World climbing fern
Lygodium japonicum/ Japanese climbing fern

a. A conservation area-wide monitoring infra-structure that detects and monitors invasions of 1/8 acre in size within 6 months of occurrence throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at least annually such that the area occupied by this species decreases by 80% each year of treatment. (At this rate, the area dominated by the species would be diminished by 99% in each site treated for 3 years.)

Threat – Imperata cylindrica/cogon grass
Rhodomyrtus tomentosa/downy rose myrtle

a. A conservation area-wide monitoring infra-structure that detect and monitors invasions of ½ acre in size within 5 years of occurrence throughout the landscape.

b. A conservation areawide herbicide program that visits and sprays all known sites at treats and eradicates all known locations.

Lacustrine marshes, blackwater streams and riverine wetlands(hydric systems)

Threat – Scleria Lacustris/ giant scleria

a. A conservation area-wide monitoring infra-structure that detects and monitors invasions of 1/8 acre in size within 6 months of occurrence throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at least annually and has no recurrences at any of the known sites.

Threat – Lygodium microphyllum/ Old World climbing fern
Lygodium japonicum/ Japanese climbing fern

a. A conservation area-wide monitoring infra-structure that detects and monitors invasions of 1/8 acre in size within 6 months of occurrence throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at least annually such that the area occupied by this species decreases by 40% each year of treatment. (At this rate, the area dominated by the species would be diminished by 90% in each site treated for 5 years.)

Threat – Sapium sebriferum/ Chinese Tallow

a. A conservation area-wide monitoring infra-structure that detects and monitors invasions of 1/8 acre in size within 6 months of occurrence throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at least annually and has no recurrences at the known sites.

Threat – Melaleuca quinquenervia Melaleuca

a. A conservation area-wide monitoring infra-structure that detects and monitors new invasions down to the individual plant level within 6 months of occurrence throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at least annually which reduces or eliminates these sites and eradicates all newly found occurrences.

Threat – Schinus terebinthifolius Brazilian pepper

a. A conservation area-wide monitoring infra-structure that detects and monitors invasions throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at least bi-annually and has no recurrences at the known sites.

Threat – Ludwigia peruviana / Primrose willow; Panicum repens/torpedo grass; Hymenachne amplexicaulis/West Indian marsh grass; Psidium cattleianum/strawberry guava Psidium guajava/common guava; Solanum viarum/tropical soda apple

a. A conservation area-wide monitoring infra-structure that detects and monitors invasions throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays selected sites.

Threat – Imperata cylindrica/cogon grass

a. A conservation area-wide monitoring infra-structure that detect and monitors invasions of ½ acre in size within 5 years of occurrence throughout the landscape.

b. A conservation area-wide herbicide program that visits and sprays all known sites at treats and eradicates all known locations.

2) Since invasive species can move into your conservation area from outside you probably need to consider conditions in upstream areas, upwind areas or a buffer zone surrounding it. What area(s) beyond the bounds of your conservation area do you believe should be included when assessing invasive species threats?

The area of peninsular Florida from coast to coast and at least 50 miles to the north and South of the conservation area needs to become a buffer around the conservation site. As soon as new invasive introductions are discovered in this region participants in the conservation area would be alerted so they could be on the lookout for the new species.

3) Identify 3 to 5 strategies that will allow you to achieve the objective(s) you identified in question 1.

Once the various strategies outlined in the previous homework assignment #2 are in place, setting up an infrastructure to start up and assist landowners in achieving these conservation goals will be achievable.

4) Identify at least one way that you could measure (monitor) progress towards the objectives you identified in question 1. Be as specific as you can about the species, factor, or indicator to be monitored and the kind of data (e.g. cover, density, concentration, total area covered, etc) to be gathered.

Getting a monitoring system in place to detect the extent of the various species invasions throughout the region is essential and must be in place before any sort of quantifiable invasive species threat measurement can be assessed. After the system is in place the next step will be sharing the information conservation area wide with concerned landowners. Finally, a process of actually controlling plant invasions has to be in place in order to see a decline in individual species.