

Everglades Cooperative Invasive Species Management Area

2009 Annual Report



www.evergladescisma.org

Introduction

This report will outline the accomplishments and cooperative efforts within the Everglades Cooperative Invasive Species Management Area (CISMA) during fiscal year 2009. The targets of the plan were developed during the 2008 Everglades Invasive Species Summit, held at Florida International University on the 16th and 17th of July 2008. In a collaborative spirit, invasive species managers and researchers from governmental agencies, tribal groups, and other entities shared knowledge and progress in invasive species control efforts and worked to identify potential cooperative activities that could further region-wide goals of invasive species management efforts.

This is the second annual report for the Everglades CISMA, but many of the accomplishments arose from on-going collaborations and well-established control programs. This report is not intended to supersede reporting requirements of individual agencies. Accomplishments of the annual report are arranged into five broad categories: 1) coordination & integration, 2) detection, 3) collaboration & reporting, 4) research, 5) education & training.

A. Coordination and Integration

1. Information Management

1. *Make WEEDDAR available to all partners through the Everglades restoration website, CERPZone.org.*
2. *Conduct WEEDDAR training seminar.*
3. *Conduct feasibility assessments of a paperless datasheet and a geospatial element of WEEDDAR.*

WEEDDAR (Weed Data and Reporting) database program is now being utilized by the SFWMD, National Park Service, US Fish and Wildlife and Army Corps of Engineers. WEEDDAR is available through a web interface on CERPZone. Contractors for these agencies are now trained and are entering control data into the system. Current efforts are focused on developing customized reports to meet individual program reporting requirements. The paperless data sheet and geospatial functions of WEEDSAR remain conceptual and have not yet been realized. These are future goals for WEEDDAR once agencies are fully utilizing the database.

2. Biological Control

1. *Prioritize locations for biological control agent releases.*

Site criteria for optimal release locations for biological control organisms were communicated to regional land managers in order to help identify potential release locations. Paul Pratt (USDA) developed the site criteria for the major biological control initiatives in progress and candidate locations were identified and reported during the 2009 Everglades Invasive Species Summit's annual operations updates.

Identified Priority Locations for ECISMA Partners:

- SFWMD: Brown Lygodium moth at Strazulla and WCA 3B tree islands; Melaleuca bio controls at WCA 2B and East Coast Buffer lands
- FWC: Brown Lygodium moth at Holey Land
- US Fish and Wildlife: Melaleuca biocontrols in NW Section of Loxahatchee NWR

3. Contractor Standardization

1. *Develop and implement a CISMA-wide standard operating procedure manual for contractors.*

It has been determined that a common SOP developed with participation from numerous agencies and tribes and utilized by most CISMA partners will improve contractor performance by establishing consistent operational procedures. A draft SOP document for invasive plant control contractors was initiated by a break out committee at the 2009 Summit. Committee participants identified key elements of the SOP and assigned specific tasks necessary to complete an initial draft. These included:

- A standard rating sheet
- A cross-agency list of approved herbicides
- A universal daily progress report
- A treatment methods appendix
- Inspection expectations
- Training
- Safety concerns

Once finalized, it will be CISMA partner's discretion to adopt the SOP. Contractors and participating agencies and tribes will attend a SOP training seminar, to be held in 2010.

4. Engineering Prevention

- 1. Initiate dialogue with agencies and their representatives to pursue project element designs that minimize new introductions.*

CISMA members involved in CERP-related construction projects have initiated discussions with project planners and designers regarding potential engineering solutions to prevent exotic species invasion via CERP infrastructure. Candidate Everglades restoration projects for consideration include the Tamiami Trail improvements under DECOMP and the Eastern Everglades Retention Areas.

5. Inter-agency Synchronization

- 1. Work with DOT and FP&L to identify cooperative projects.*

ECISMA facilitated a collaborative project between ENP, DOT, USFWS, and the Miccosukee Tribe of Florida to control exotic plant species along Tamiami Trail (US 41). The Tamiami Trail Exotic Vegetation Removal Project involved removal of exotic plants downstream of water control structures in order to reduce invasive plant coverage.

B. Detection

1. Regional Assessments

- 1. Complete aerial sketch map and analysis of invasive plant distributions in northern half of ECISMA.*

Digital aerial sketch mapping was completed for Holeyland & Rotenburger WMA's, Loxahatchee NWR, Big Cypress Reservation and the northern regions of WCA 2 and 3, Miccosukee Reservation and Big Cypress National Preserve. Coverage data for Old World climbing fern, Brazilian pepper, Melaleuca, Australian pine and several other species were collected and shared with all CISMA partners. To meet mandates under the Everglades Forever Act, priority invasive plants will continue to be monitored within the ECISMA area. To minimize logistical and budgetary strains, one half of ECISMA will be mapped each year. Ground truthing exercises were conducted during October 2010. Data from this effort are being analyzed and will be reported at the 2010 Summit.

2. Early Detection and Rapid Response

1. *Develop training protocols for ECISMA rapid responders.*

As an initial step in developing a training SOP for ECISMA rapid response to large constrictors, a break out session committee at the 2009 Summit completed a training protocol outline and identified the following key elements necessary to complete the document:

- Reporting mechanisms
- Roles and responsibilities
- A response protocol flow chart
- Supplemental training requirements

A key need that was identified is a central dispatch number that can be used to direct calls to responders on a regional basis. Subsequent to the Summit, FWC opened its Nuisance Alligator Hotline to python sighting reports. Additionally, the SFWMD implemented an internal visual search team training program which was based upon the ECISMA Python Patrol Program. To date, SFWMD employs 18 staff to conduct periodic searches for pythons and other invasive animals and has shared the curriculum with ECISMA partners for their utilization.

2. *EDRR Draft Plan Development*

A draft Early Detection/Rapid Response Plan was developed to provide a conceptual design, framework, and set of strategies to minimize the establishment and spread of new invasive exotic species within the ECISMA through a coordinated framework of partners and processes. The plan provides many pre-determined management responses, and establishes a decision-making infrastructure that will facilitate rapid resolution of remaining issues. The plan contains a number of objectives and related tasks, along with a rapid response action planning protocol. The rapid response action protocol is being finalized after consideration of several rapid response scenarios for different invasive species (e.g., northern African python, Tegu lizard, or Lumnitzera rapid response efforts). Comments received on the draft plan will be incorporated into the final plan and submitted to the ECISMA Steering Committee for final approval.

3. EDRR Activities

Sacred ibis rapid response and eradication:

ECISMA recognized the need to act quickly to eradicate the population of sacred ibis in Southeast Florida. ECISMA acquired a \$25,000.00 grant from the Everglades Foundation to pay USDA Wildlife Services to eradicate the sacred ibis. From August 2008 to March 2009 USDA tracked and removed all known individuals (73) with the exception of two birds with radio transmitters, which continue to be monitored. To date, no additional sacred ibis have been observed.

Nile Monitor Rapid Response:

In August 2008, ECISMA collaborators initiated surveys for the Nile monitors near Homestead Air Force Reserve Base, in close coordination with similar efforts by USDA biologists working on the Base. Several large monitors were harvested using traps and survey information was mapped. Additionally, ECISMA collaborators made contact with local agricultural workers to increase awareness in the area. Results from the initial assessment strongly suggest that the population is established and is likely beyond eradication.

Tegu Lizard Rapid Response:

For several months in 2009, ECISMA collaborators deployed traps near Florida City in an effort to assess the extent of populations of Colombian black and white tegus (also known as black and gold tegu), *Tupinambis teguixin* and Argentine black and white tegus, *Tupinambis merinae*. Both species were initially observed by regional biologists conducting Nile monitor surveys. Biologists from NPS, FWC, and Miami-Dade assisted with this preliminary rapid assessment effort. The preliminary trapping effort has concluded. Gut content analysis is being performed by FAU biologists. ECISMA hopes these data can be utilized by state wildlife officials if this species becomes a candidate for listing as a Reptile of Concern.

Lumnitzera racemosa rapid response:

Regional biologists discovered an exotic estuarine tree species escaping cultivation at Fairchild Tropical Botanic Gardens in 2009. ECISMA partnered with FTGB to conduct 3 eradication workdays. Volunteers from 21 different agencies, Tribes and organizations participated in the control events. Additional monitoring revealed a larger population than was originally identified, so initial treatment of all plants was not accomplished. Lumnitzera has spread to adjacent Miami-Dade County conservation lands in Cutler Bay. ECISMA continue to address the eradication of Lumnitzera in 2010. It is still believed that this species can be eradicated in the short term if control and monitoring efforts are sustained.

C. Collaboration & Reporting

1. Annual Report

1. *Complete annual report for the Everglades CISMA*
2. *Enter program data presented during the 2008 Summit into ECOSTEMS.*

The operations updates from the 2008 and 2009 Summits were posted on the ECISMA website and will continue to seek assistance to collate and enter these data into ECOSTEMS. This annual report will be posted on the website once finalized by the steering committee.

2. Collaboration

1. **Identify funding opportunities.**

Everglades CISMA identified several funding opportunities in 2009, including the US Fish and Wildlife “Pulling Together Initiative” and the Everglades Foundation “Matching Fund Grant.” Unfortunately, the proposal submitted to the USFWS for Kripa EDRR efforts was not accepted. A similar proposal for Kripa will be submitted to the USFWS Coastal Grant Program in April 2010.

D. Research

1. Coordination

1. Generate a list of scientists currently engaged in research within the CISMA.

The Research Sub-Committee currently maintains a list of researchers who study invasive species within or have applicability to the CISMA. The committee is in the process of listing researchers' names, contact information, and their research interests for the ECISMA website similar to the style found at the Florida Coastal Everglades webpage that lists Everglades Researchers funded by the National Science Foundation. The database will be searchable and easily updateable. There are 80 scientists in the database and 25 of them have given permission for ECISMA to post their publications on the website database.

E. Outreach

1. Training

Develop a training module for use by CISMA partners at outreach events.

The training module is still under development, but elements of the module were initiated during 2009. FWC, ENP, Miami-Dade Co. and SFWMD are developing identification cards for invasive animals, which are expected to be printed and distributed during the 2010 work year. The cards will provide important identification and reporting tips for priority species. Additional elements of the module have been drafted for python search team training already discussed under EDRR above. ECISMA continues to work toward completion of a complete training module that places an emphasis on early detection, rapid response & reporting.

2. Education and Awareness

Conduct at least three outreach presentations using the ECISMA training module.

ECISMA partners will conduct outreach presentations once the training module is complete. Planned audiences include field staff of partner agencies, Farm Bureaus, surveyor groups, etc. ECISMA continues to provide education and outreach through its website, EvergladesCISMA.org.

Implement improvements to annual Invasive Species Summit.

The steering committee created a summit planning committee in 2009 to help develop the meeting program and coordinate meeting logistics. The planning committee also sought to improve on previous Summits by incorporating feedback from the steering committee and attendees. These included:

- Inviting a wider audience from a variety of interest, particularly aquatic specialists;
- Asking committee chairs to give individual reports at the summit and to conduct break-out sessions;
- Continuing to refine the operations updates such that presenters emphasize information on new species, range expansions, unique pest conditions, management methods, relevant research findings, innovative treatment and capture techniques, effective outreach efforts, etc.

Develop Everglades CISMA artwork Develop a consistent ECISMA messaging style for use in public communications.

The outreach committee worked to improve ECISMA “branding” during 2009. In addition to developing a standard letterhead for correspondence, graphic designers created a logo for ECISMA, which successfully symbolizes the “all-taxa” approach of this cooperative management area.